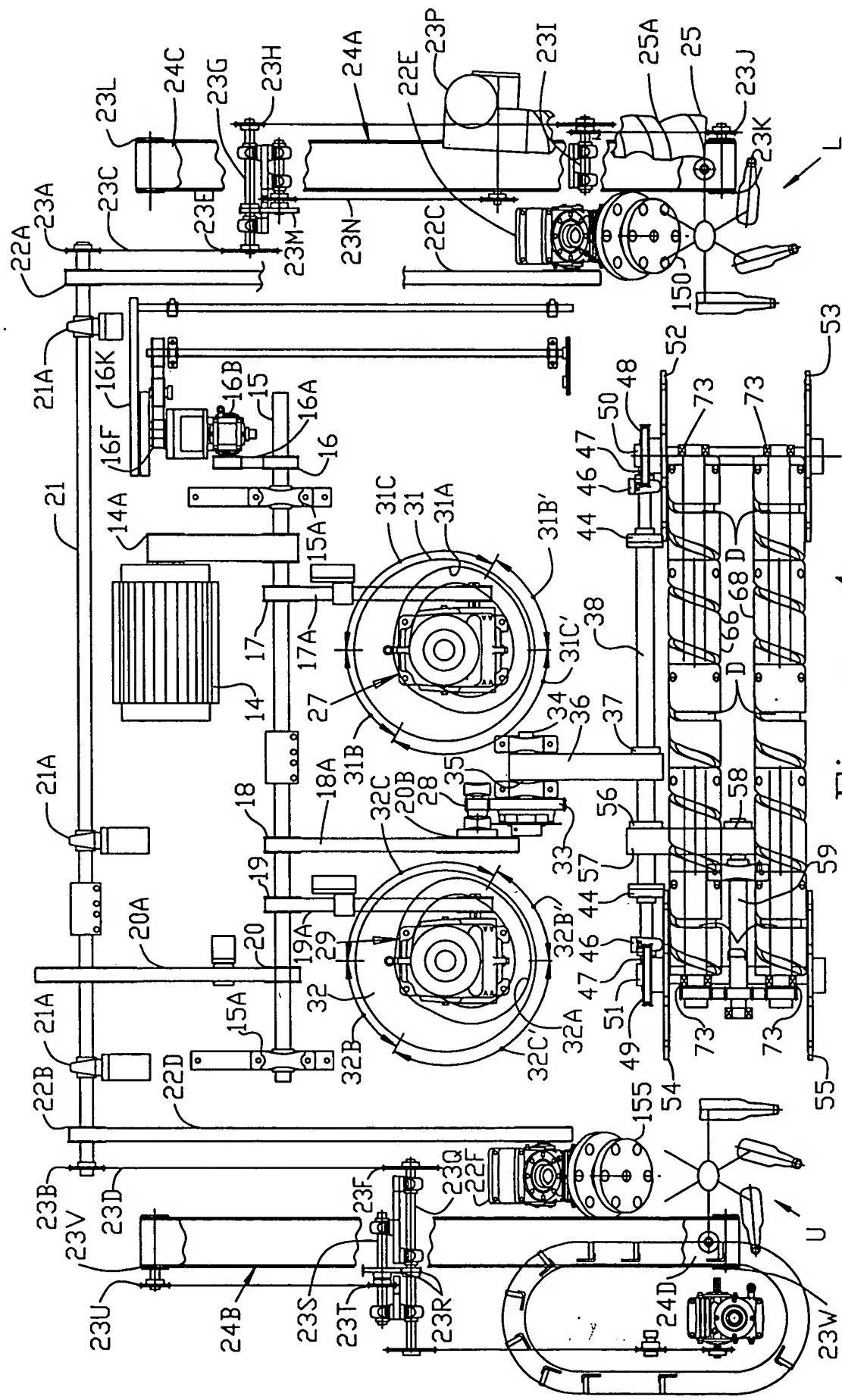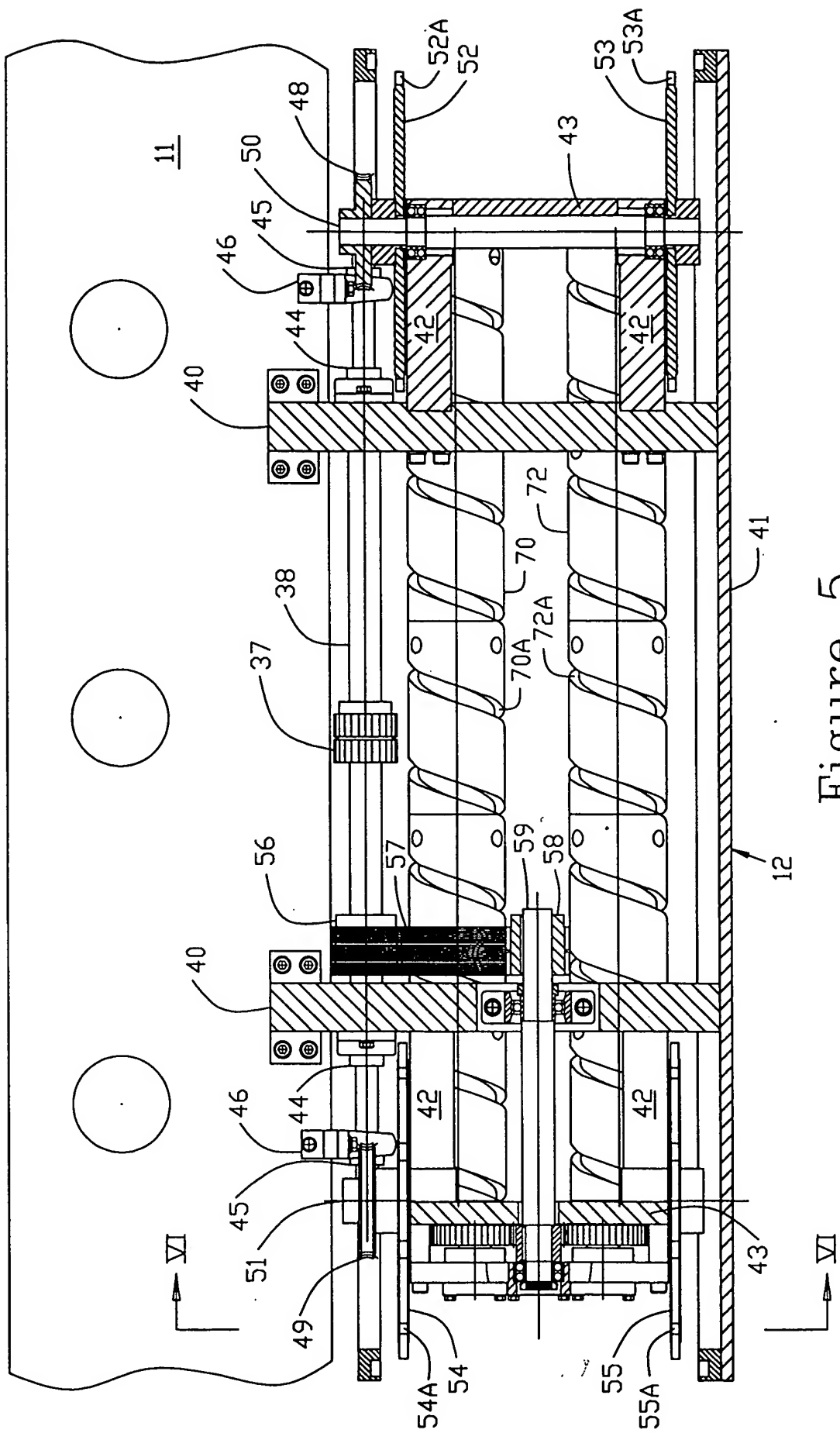Figure 1

Figure 2

Figure 3
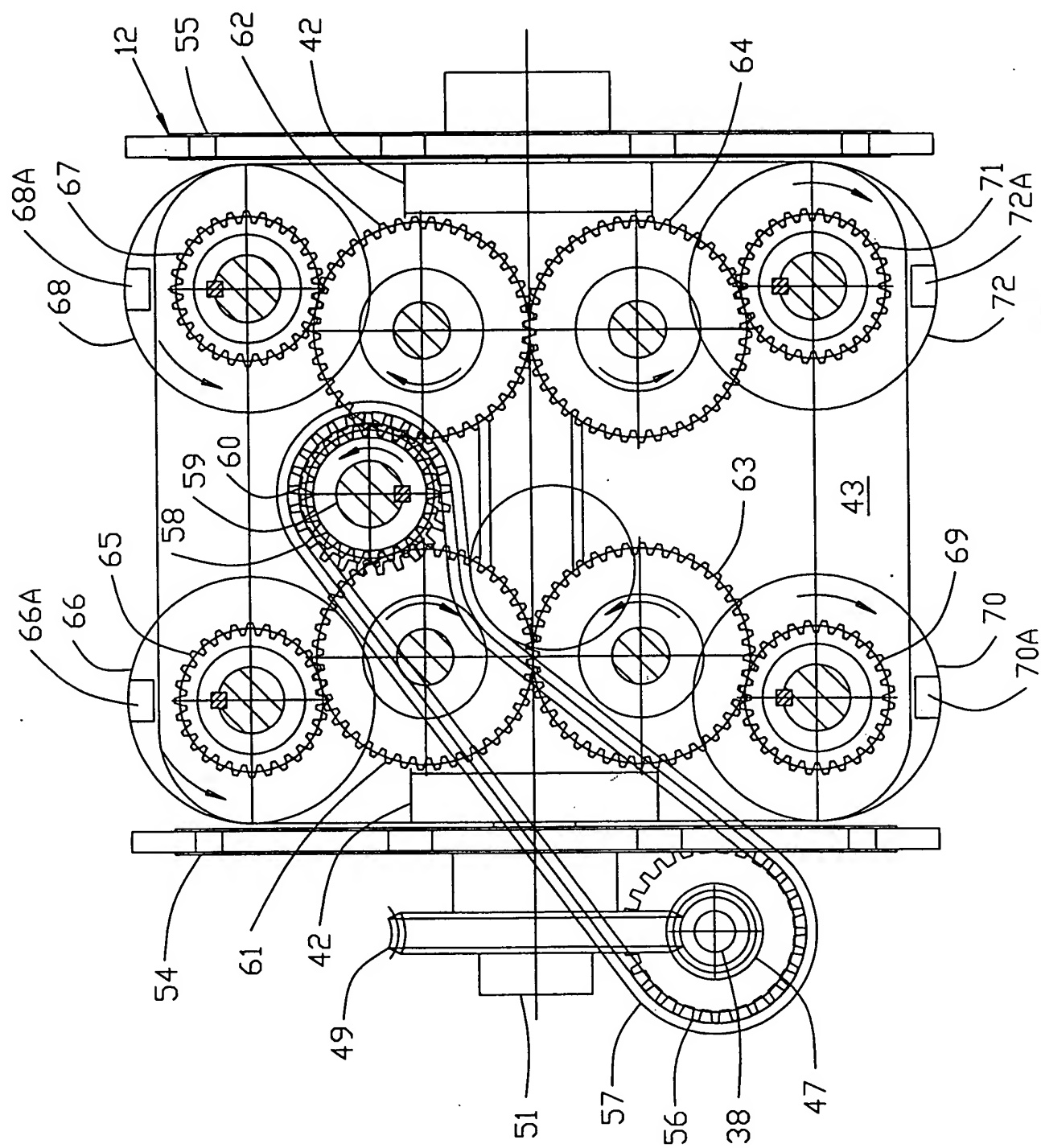
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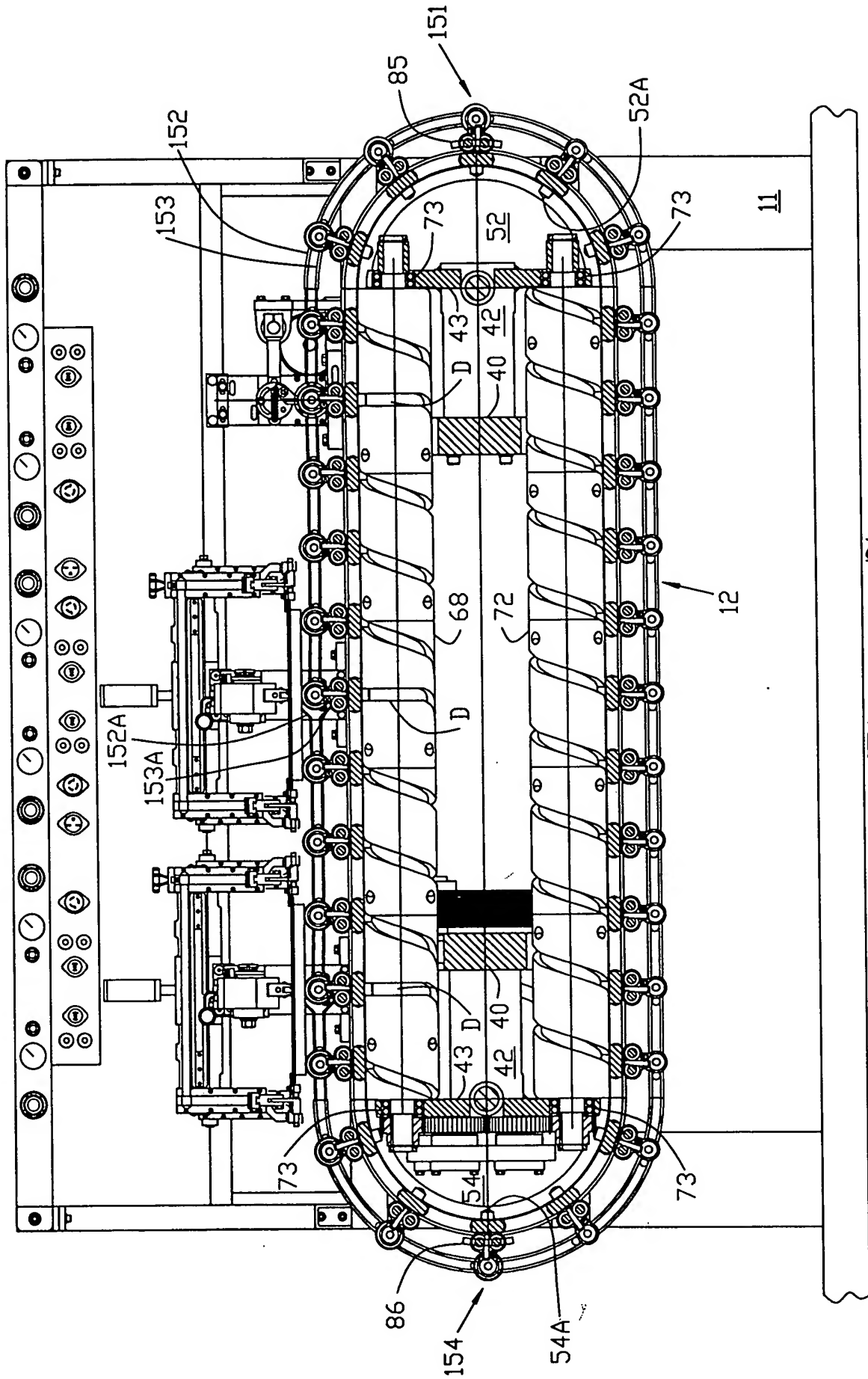
Figure 5

Figure 6

Figure 7

Figure 8

98B
98A
98
96A
98C
96B
95A
54
66
40
74
75
68
76
99
99B
99A
97A
99C
97B
95B
55
41
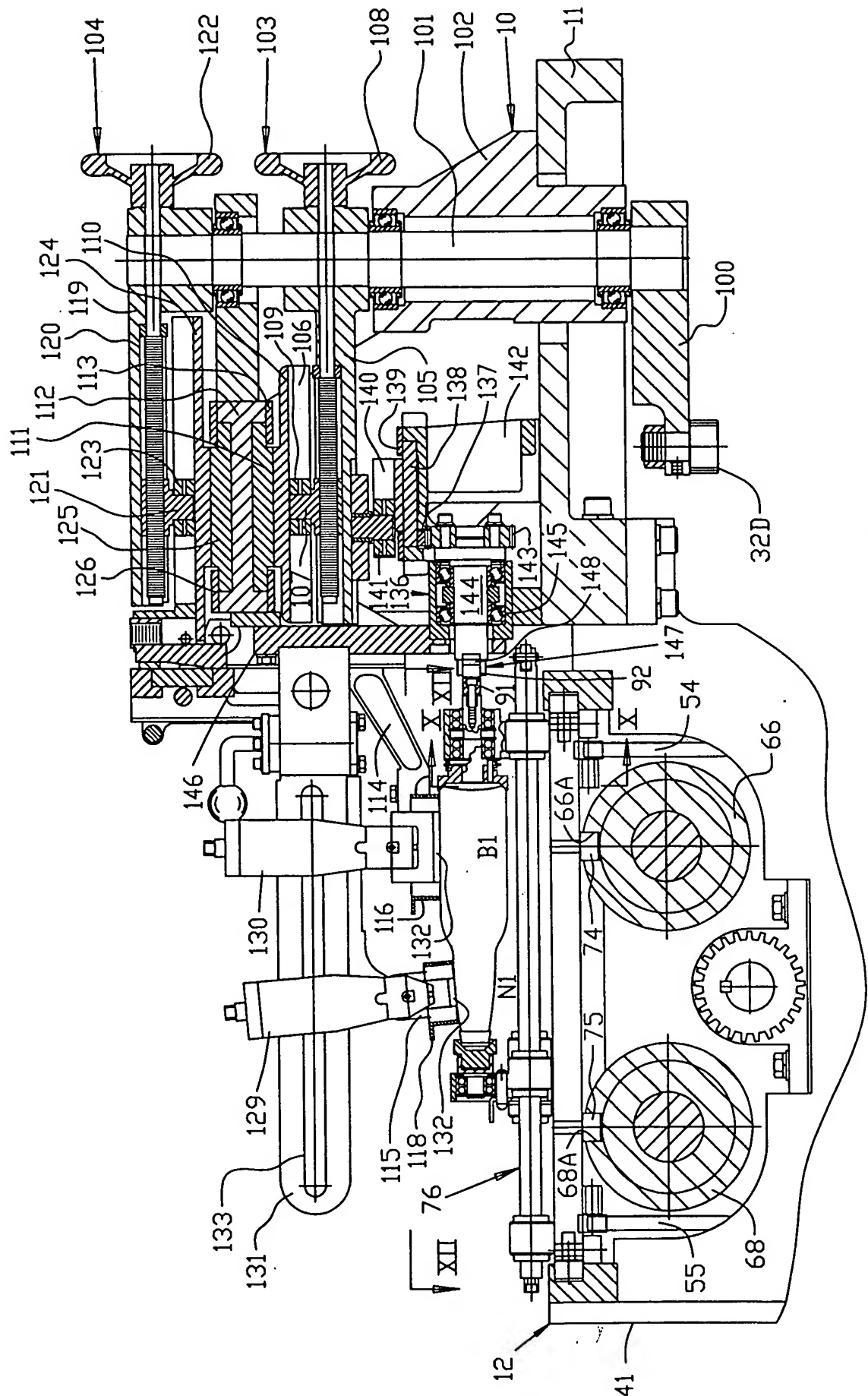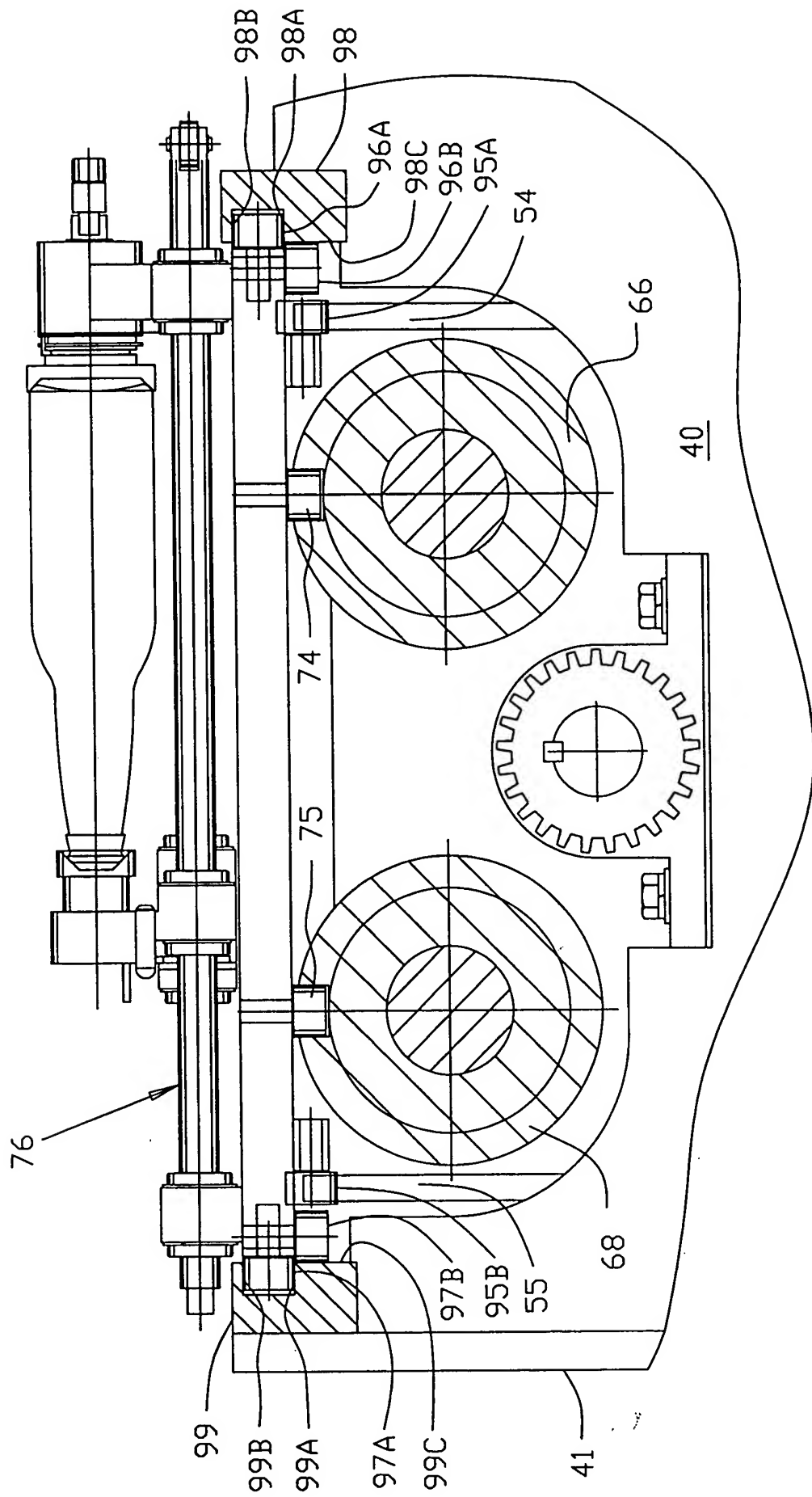
Figure 9

VERTICAL RISE AT
DECORATING STATION

76

98

76

98B

76

96A

98A

98C

96B

96C

149

66

Figure 10

68

75

95B
53A

68A

53

Figure 11D

68

75

95B

53A

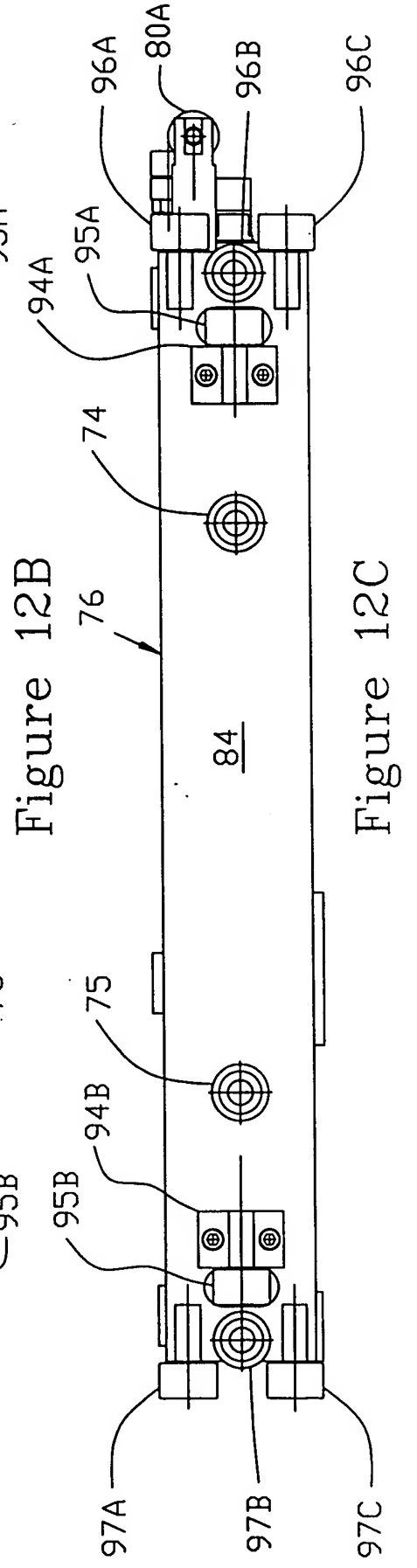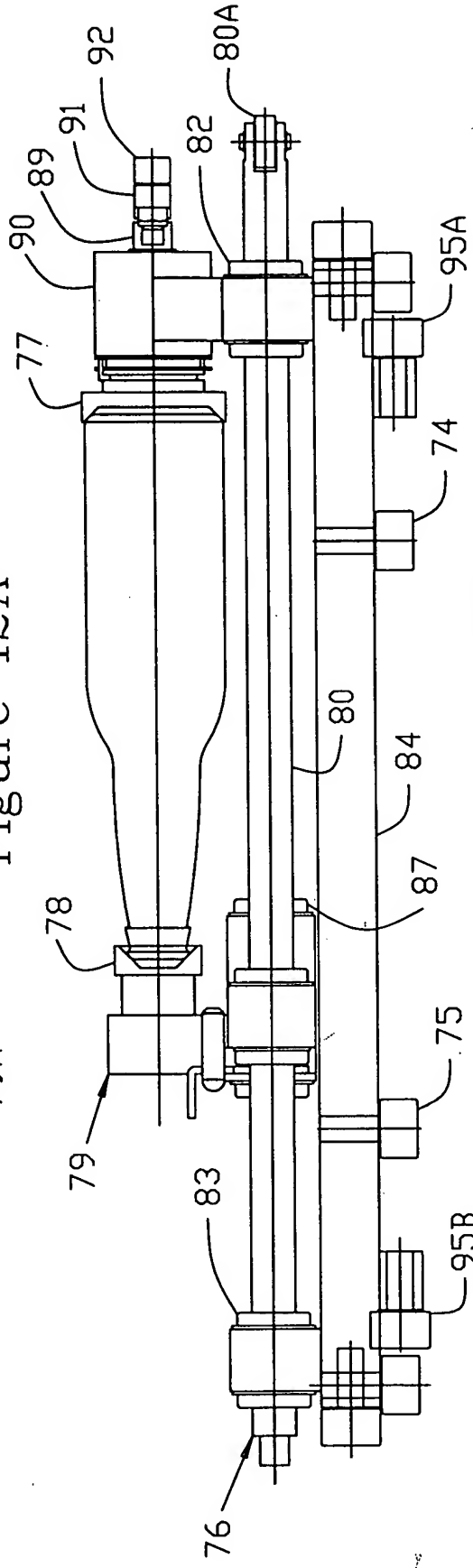68A

53

Figure 11C

68

75

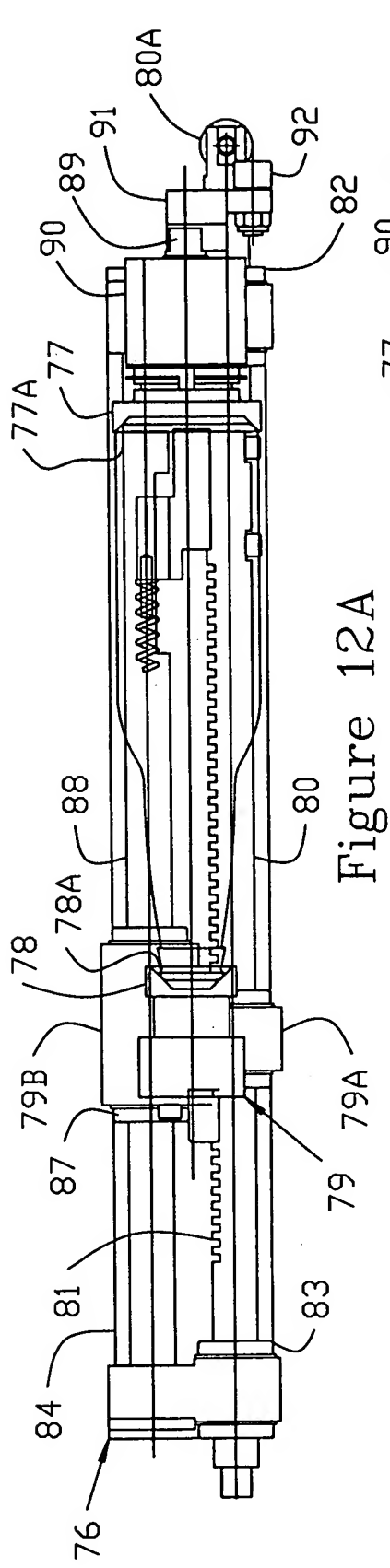95B

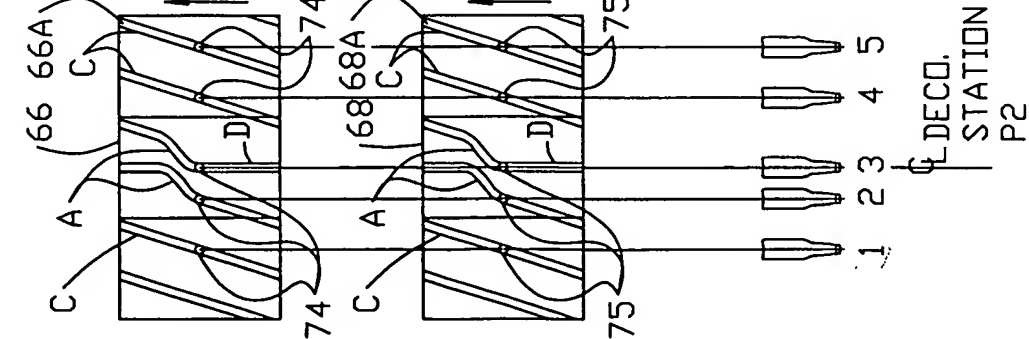53A

68A

53

Figure 11B

68

75

95B
53A

68A

53
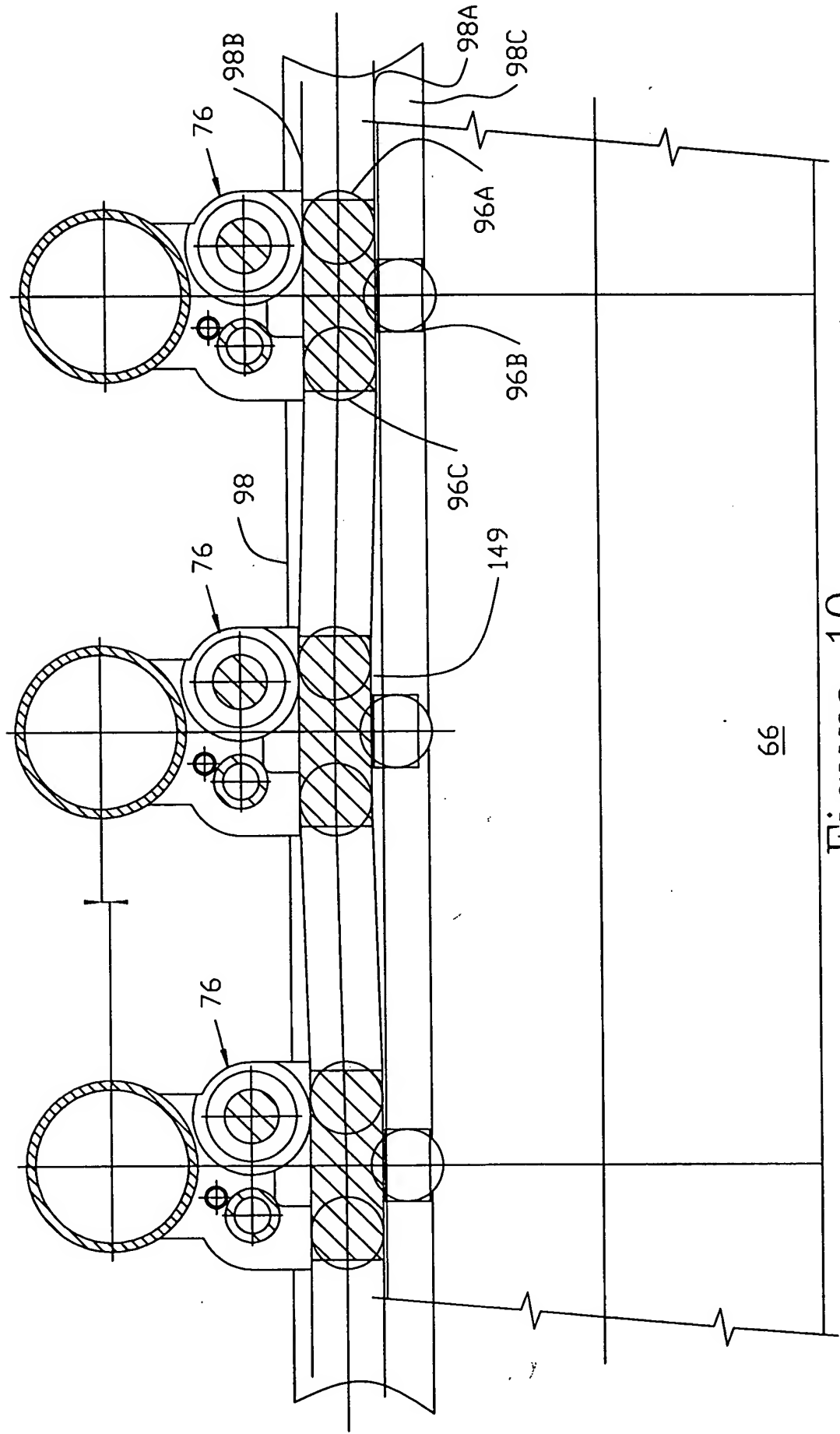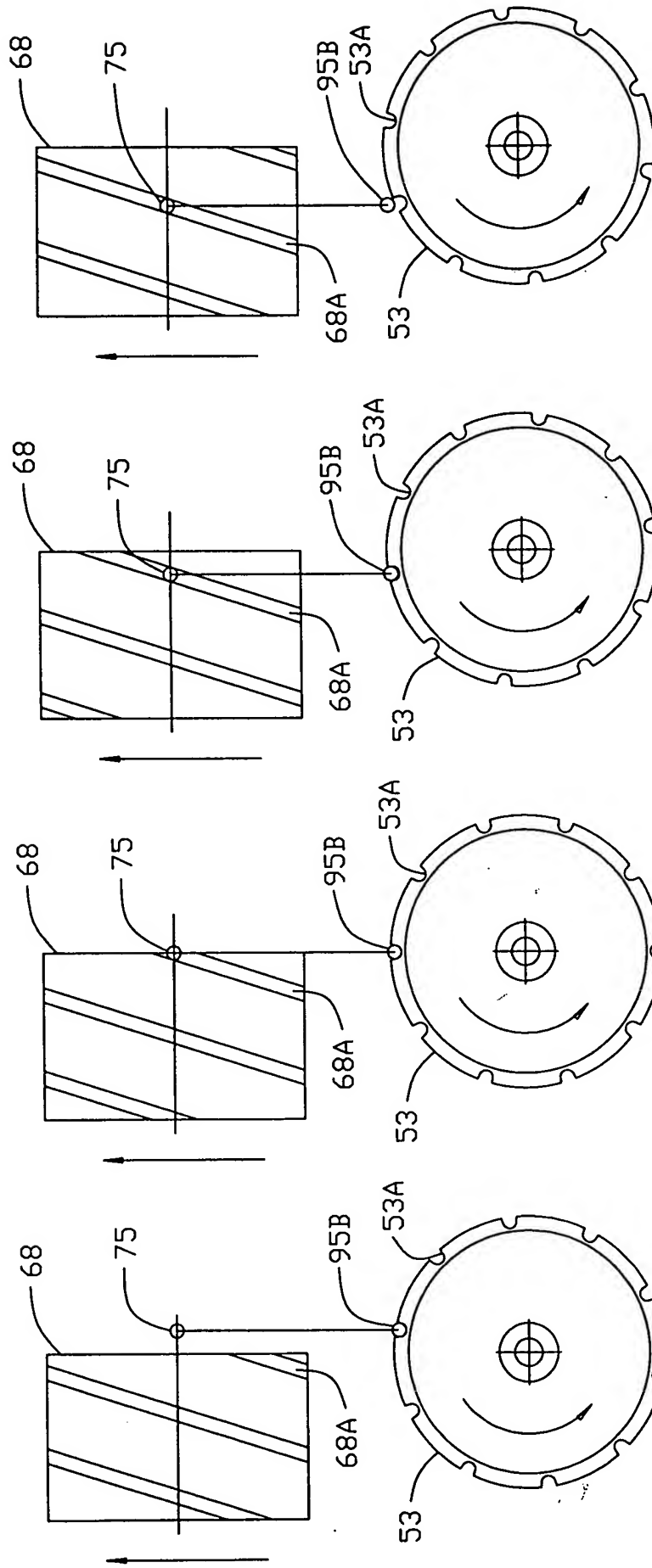
Figure 11A
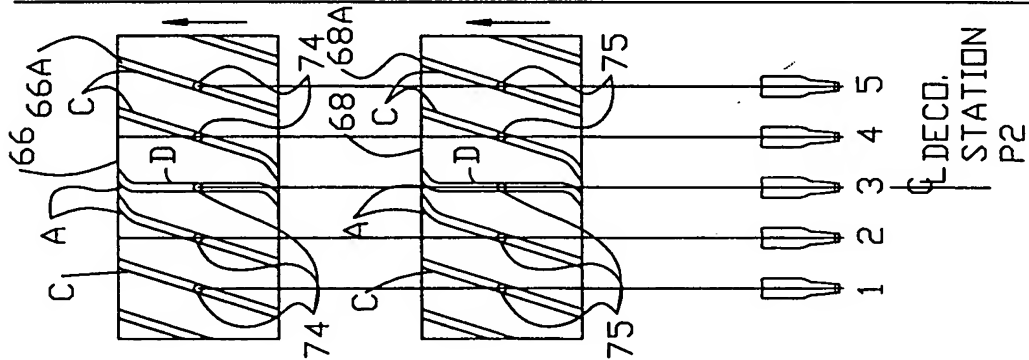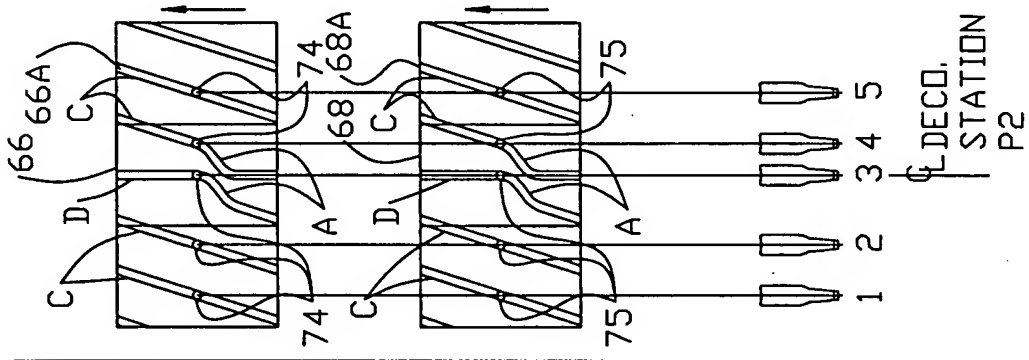
Figure 12A

Figure 12B

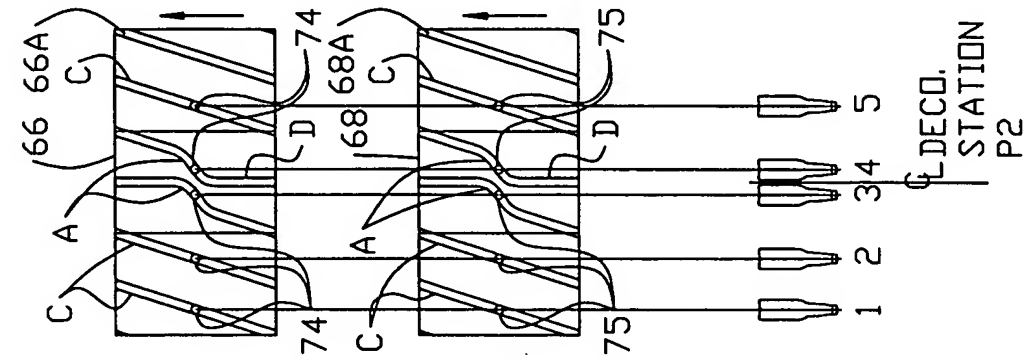Figure 12C

BEGIN
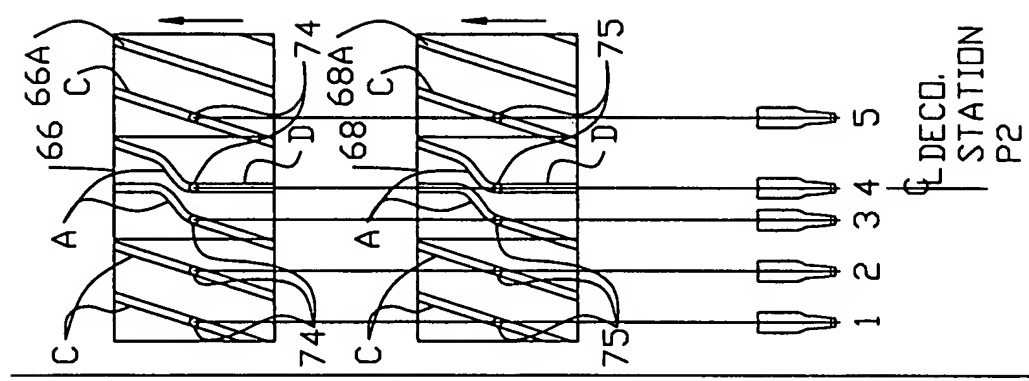DECORATION

FIG. 13A

MIDPOINT OF
DECORATION
PERIOD

FIG. 13B

END DECORATION
PERIOD, BEGIN
CARRIER INDEX

FIG. 13C

MIDPOINT OF
INDEX PERIOD

FIG. 13D
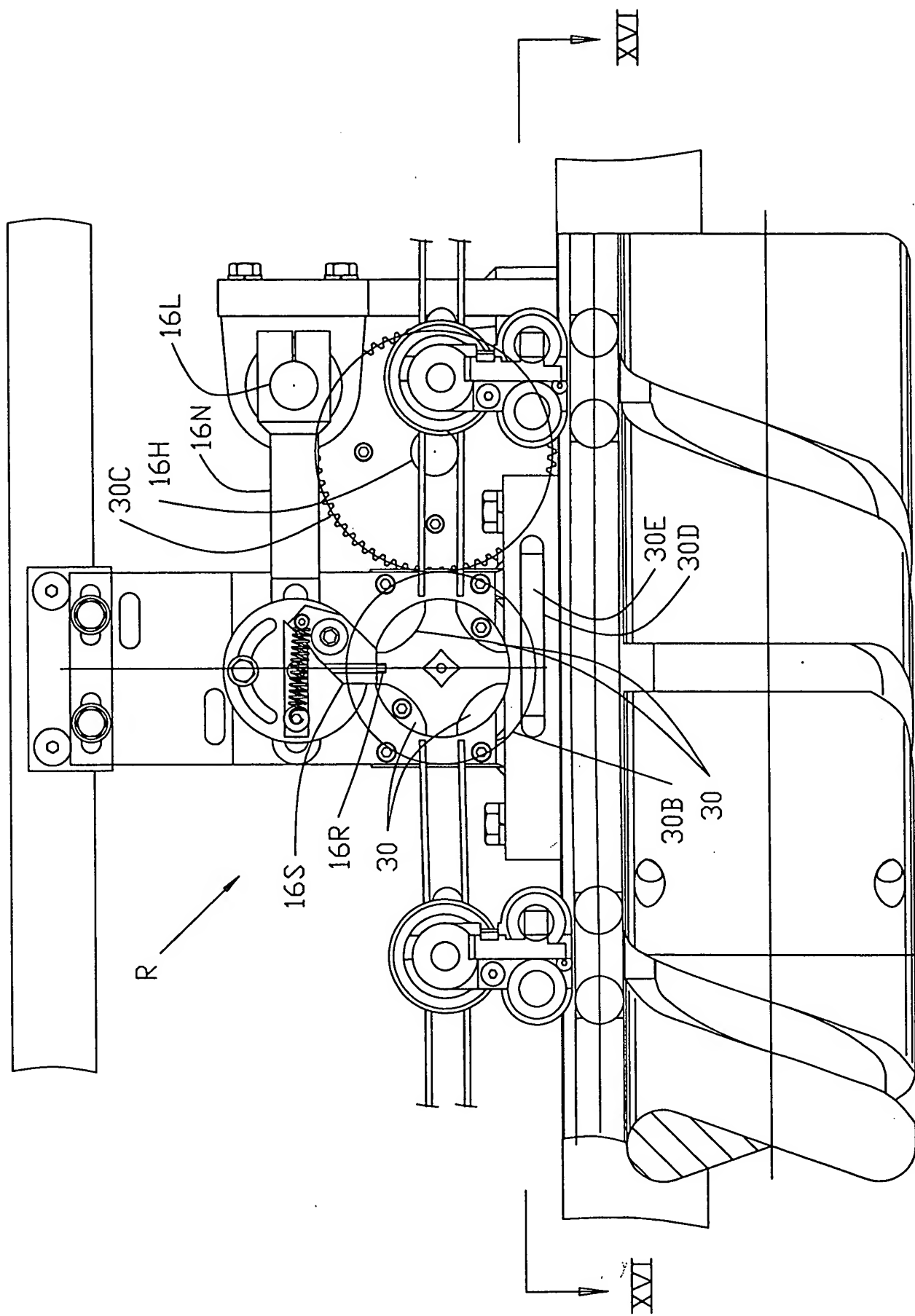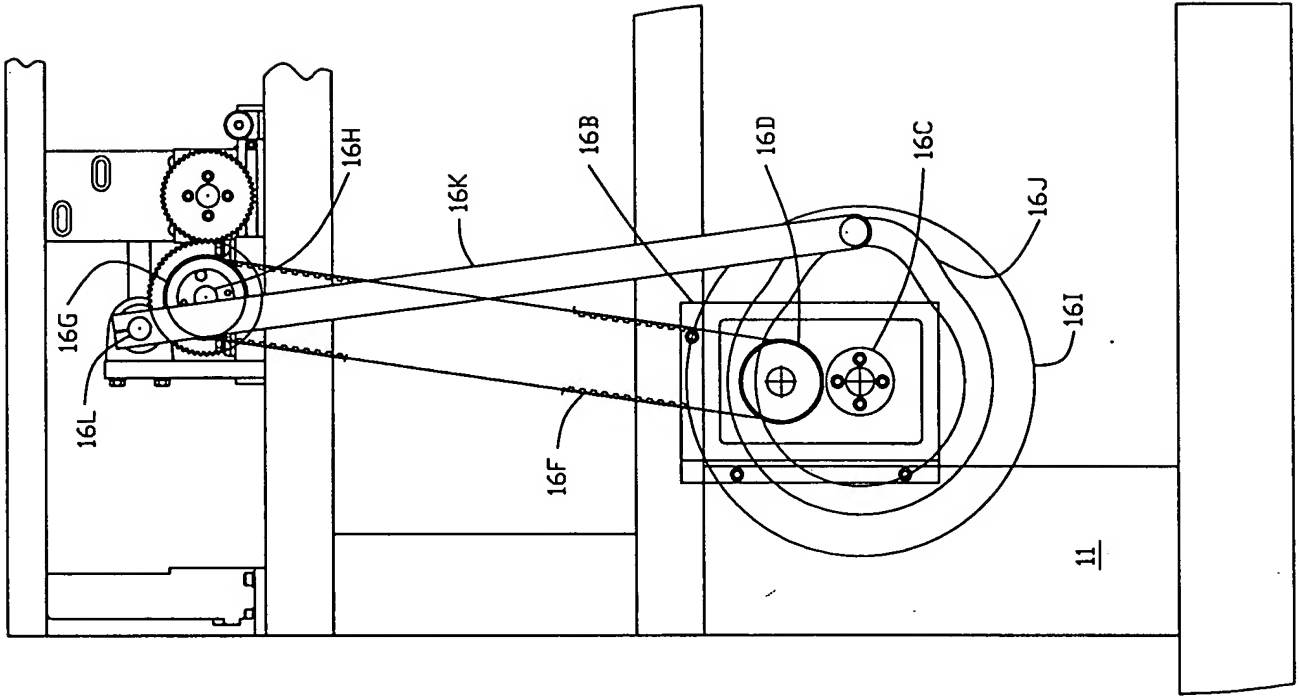
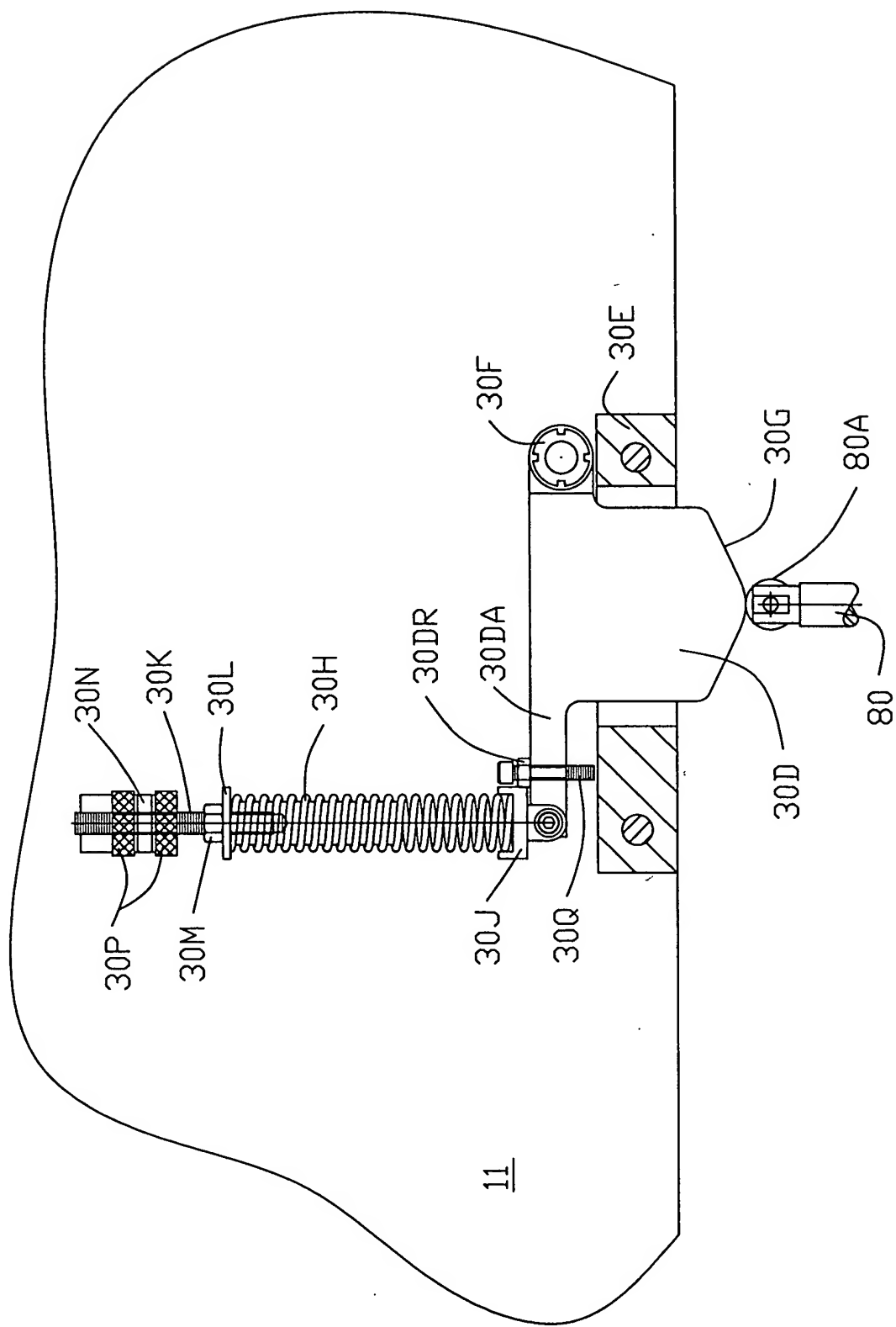END CARRIER INDEX
BEGIN NEXT
DECORATION

FIG. 13E

XVI

16L

16N

16H

30C

16R

16S

30

30E
30D

30B
30

R

XVI

Figure 14

16H

16K

16B

16D

16C

16J

16G

16L

16I

16F

11

Figure 15

Figure 16

Figure 17

198
193
L
XX
XX
A
196
24C
24A
150
151
A
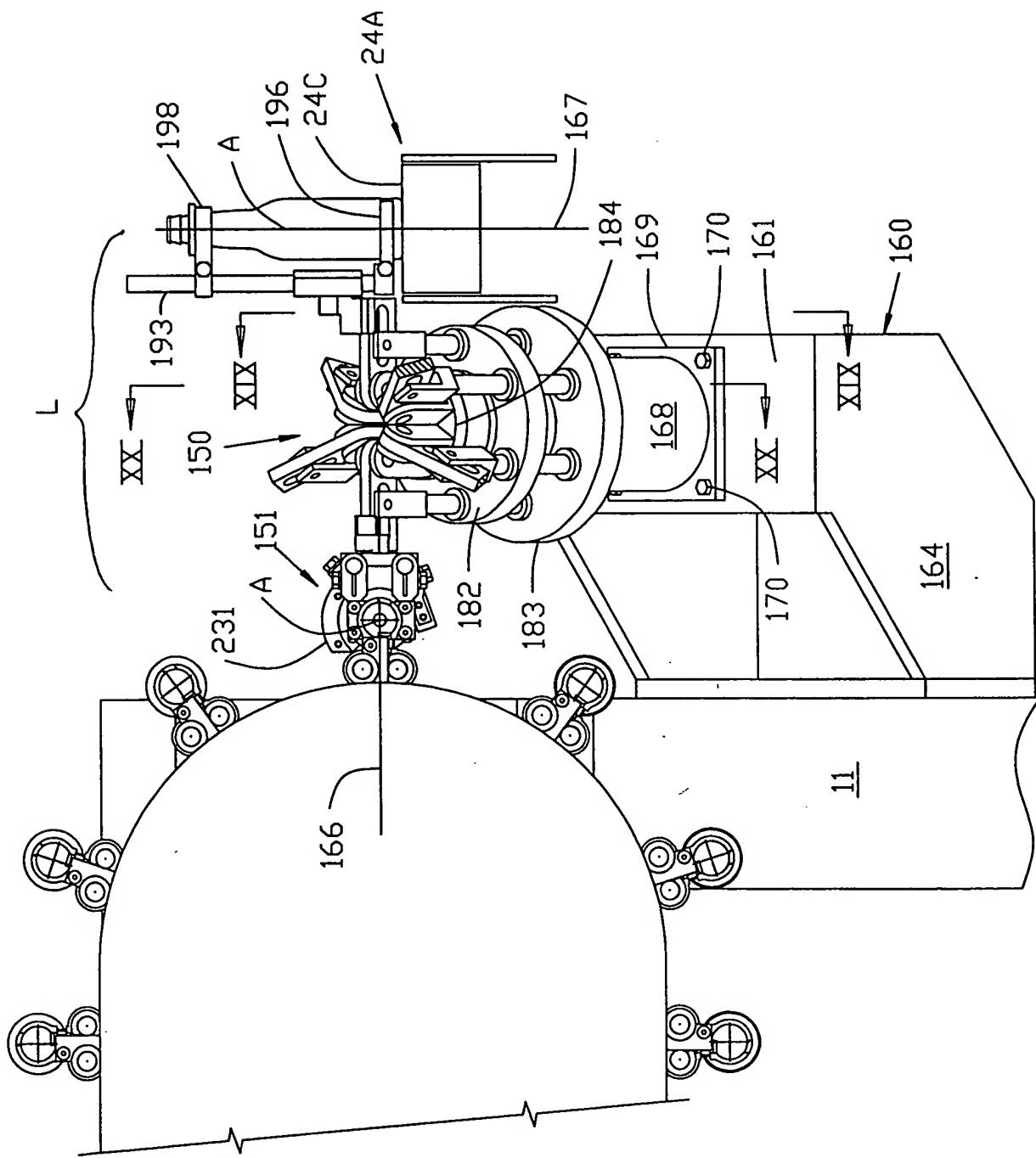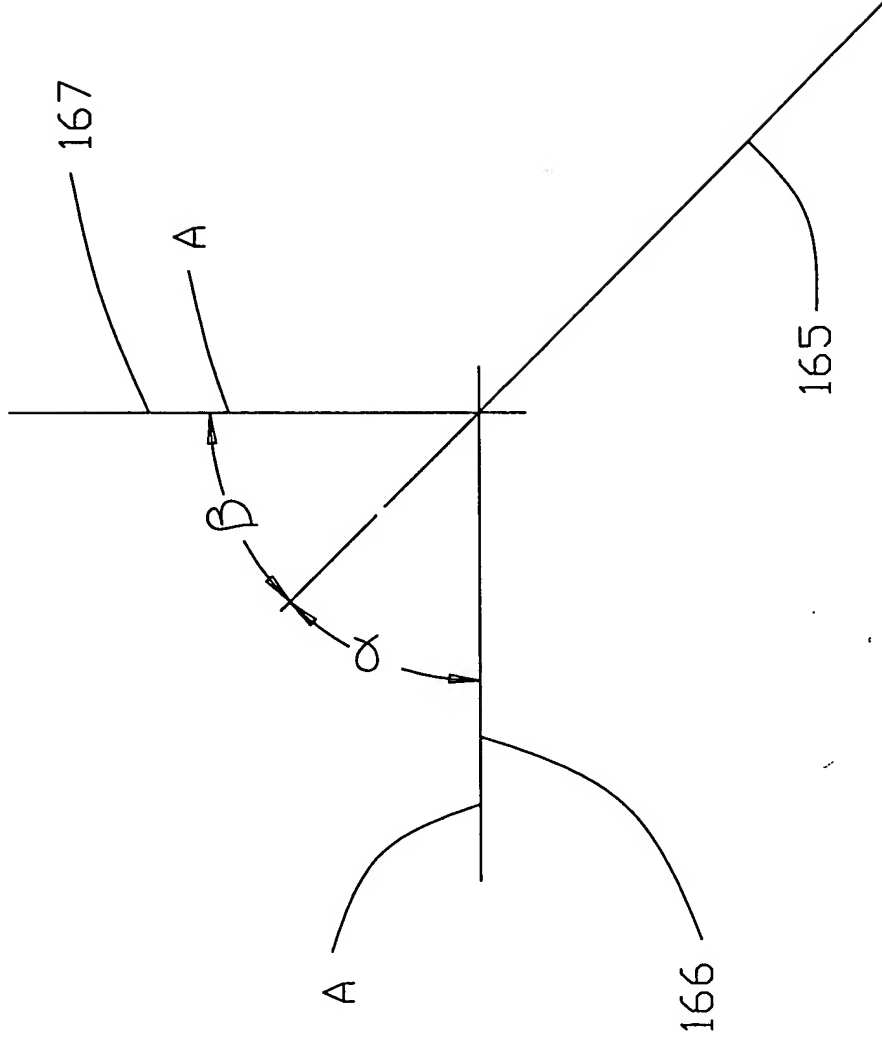231
166
167
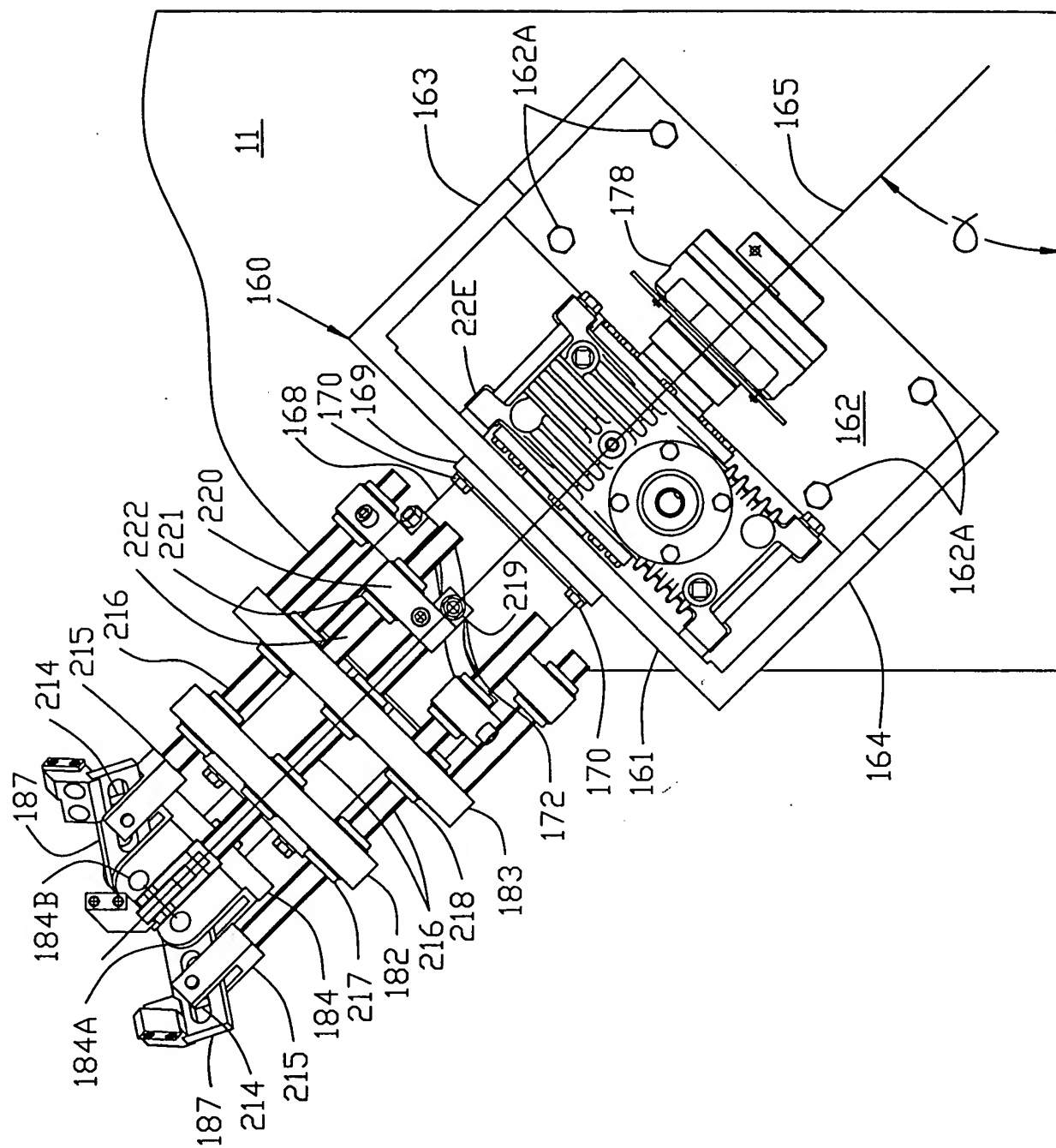184
169
170
161
182
183
168
XIX
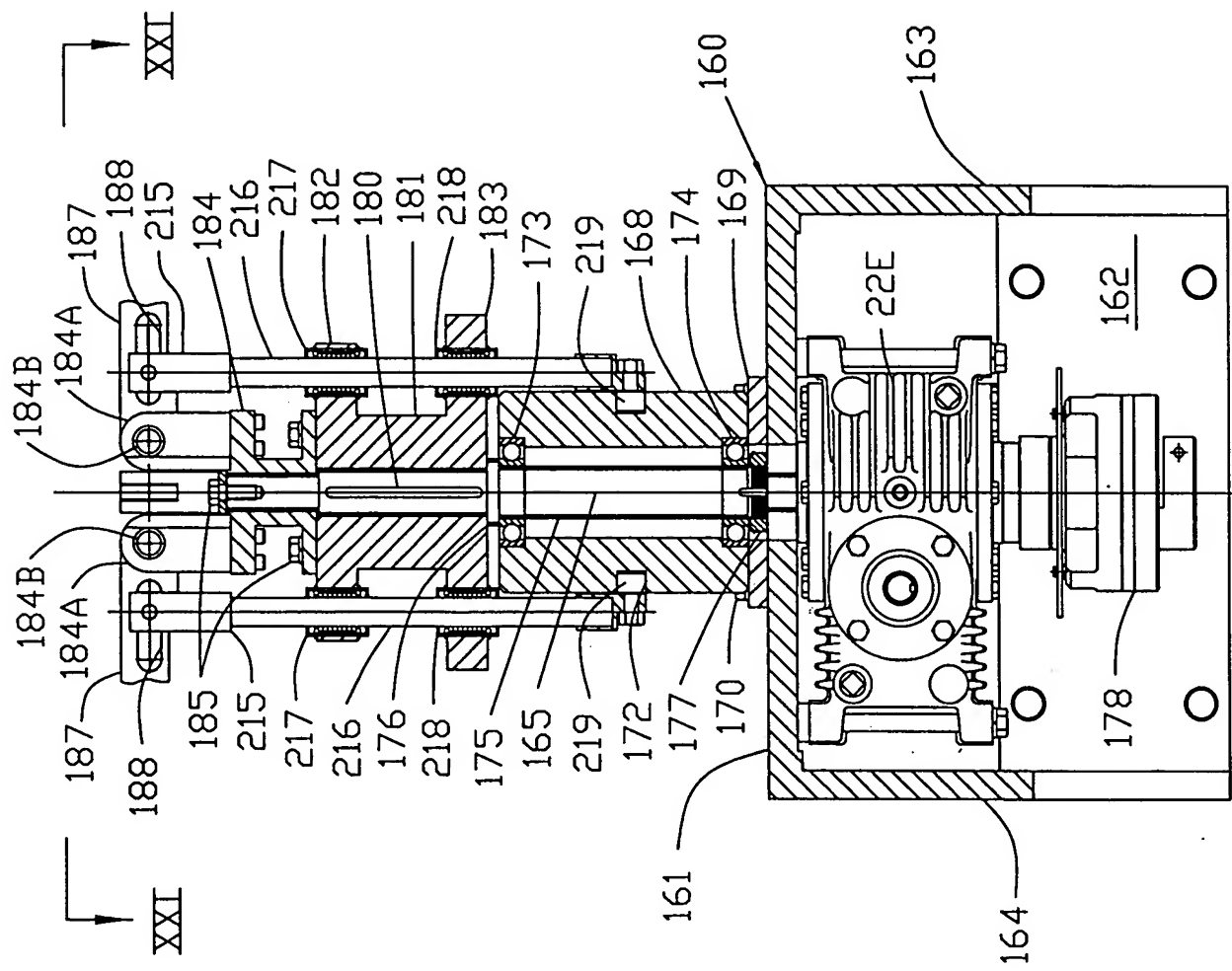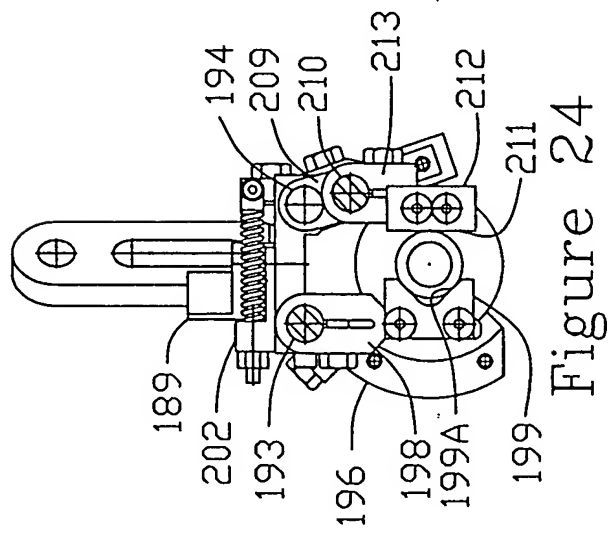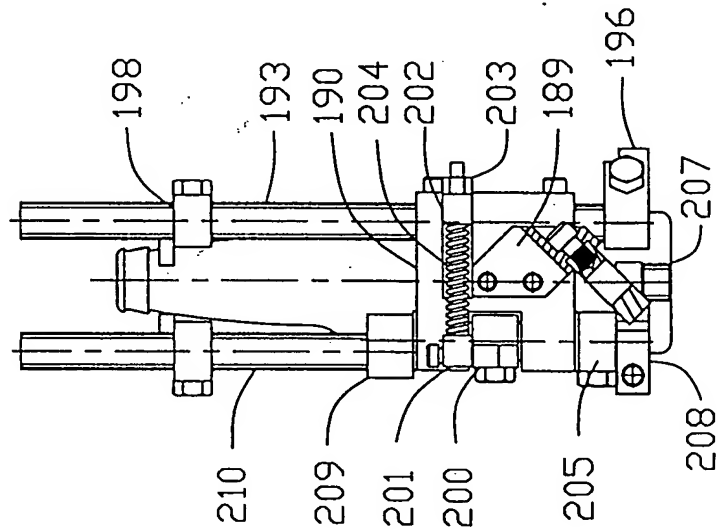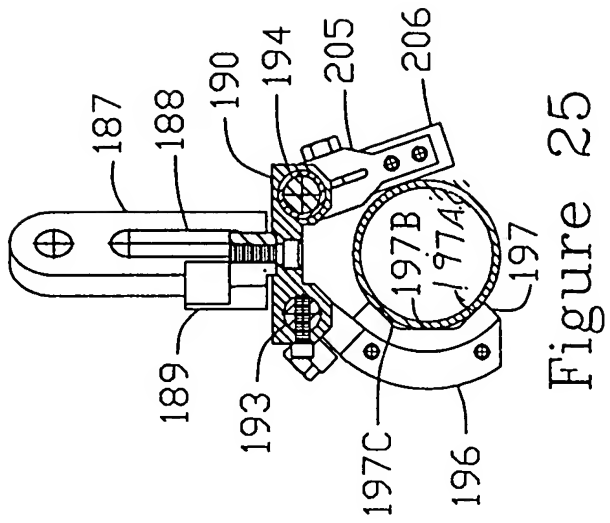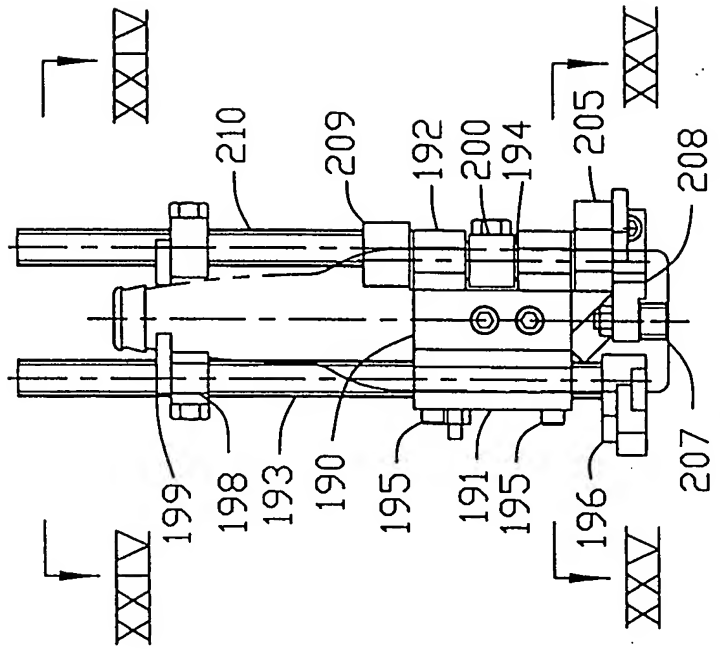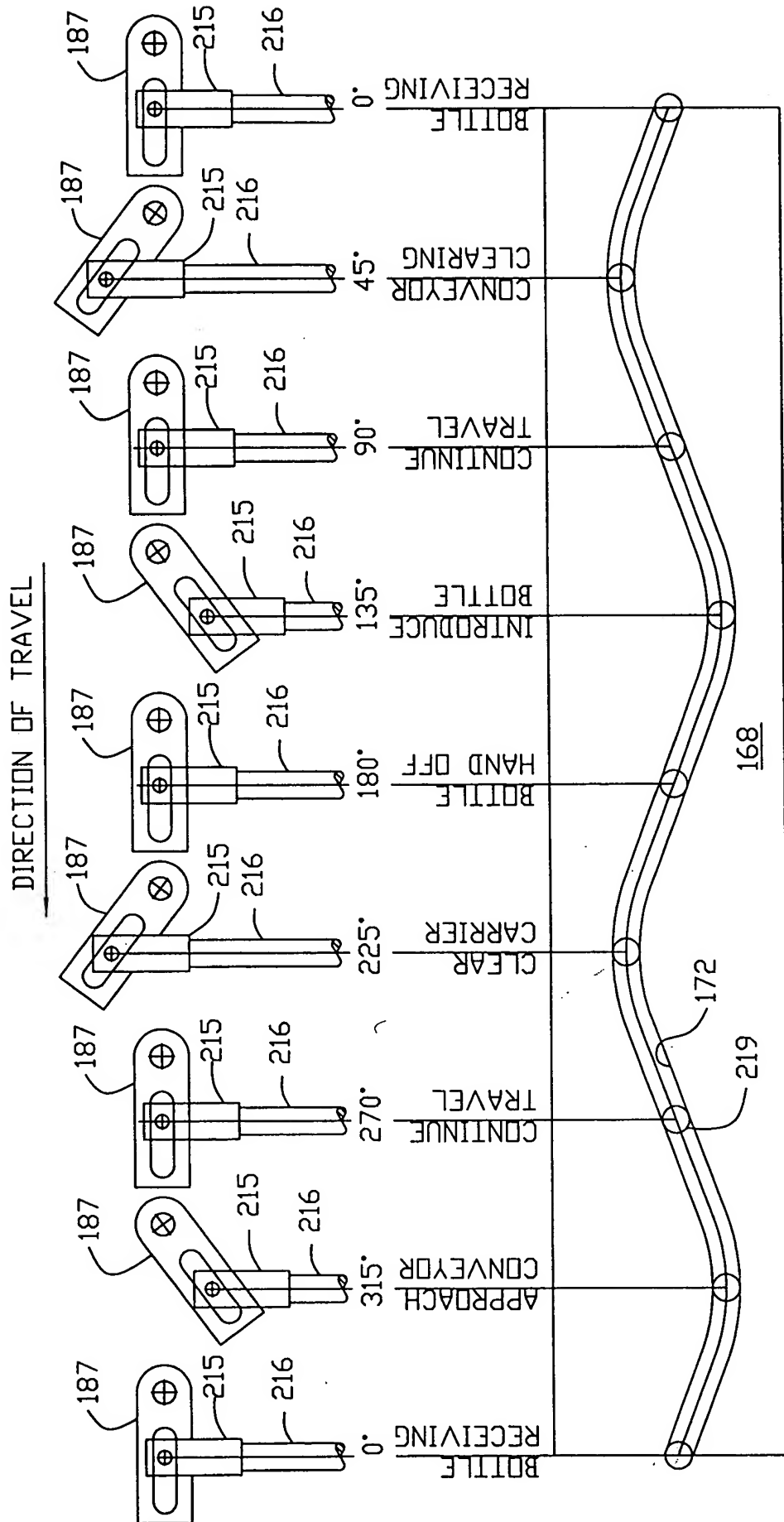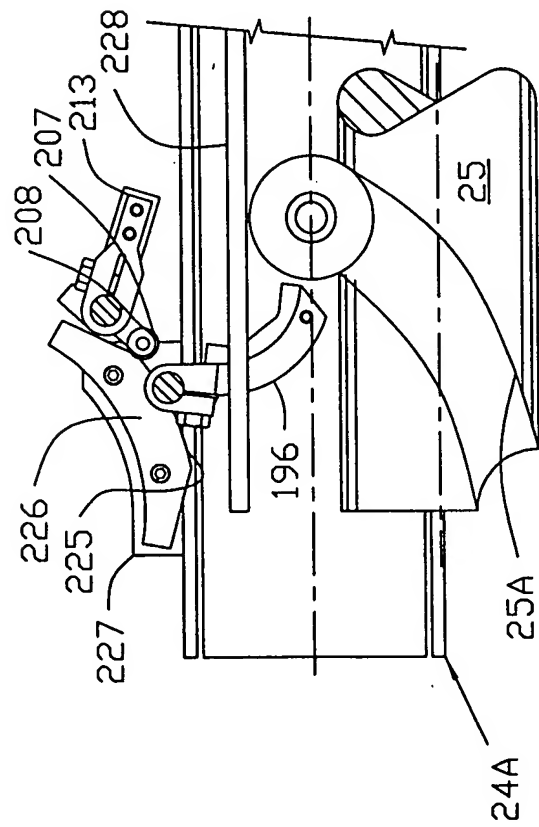XIX
XX
XX
170
164
11
160

167

A

β

α

A

165

166

Figure 18

Figure 19

Figure 20

Figure 21

Figure 25

Figure 23

Figure 24

Figure 22

DIRECTION OF TRAVEL

187
215
216
0°
BOTTLE
RECEIVING

187
215
216
45°
CONVEYOR
CLEARING

187
215
216
90°
CONTINUE
TRAVEL

187
215
216
135°
INTRODUCE
BOTTLE

187
215
216
180°
BOTTLE
HAND OFF

187
215
216
225°
CARRIER
CLEAR

187
215
216
270°
CONTINUE
TRAVEL

187
215
216
315°
APPROACH
CONVEYOR

187
215
216
0°
BOTTLE
RECEIVING

168

172

219

Figure 26

228

225
213

208
207

226
227

196

24A

25

25A

Figure 27

228

208 207
213

226
225

227

196

24A

25

25A

Figure 28

228

208
225
213

207

226

227

196

24A

25

25A

Figure 29

228

227
225

213

226

208
207

196

24A

25A

25

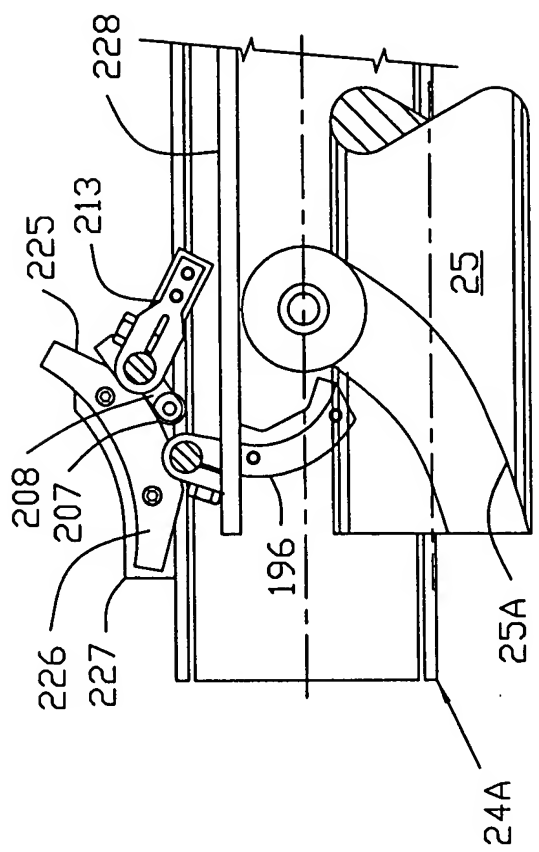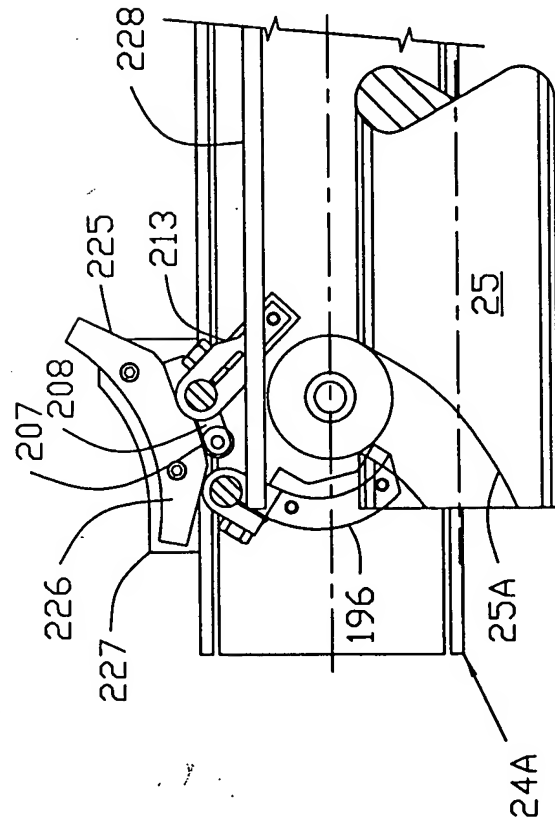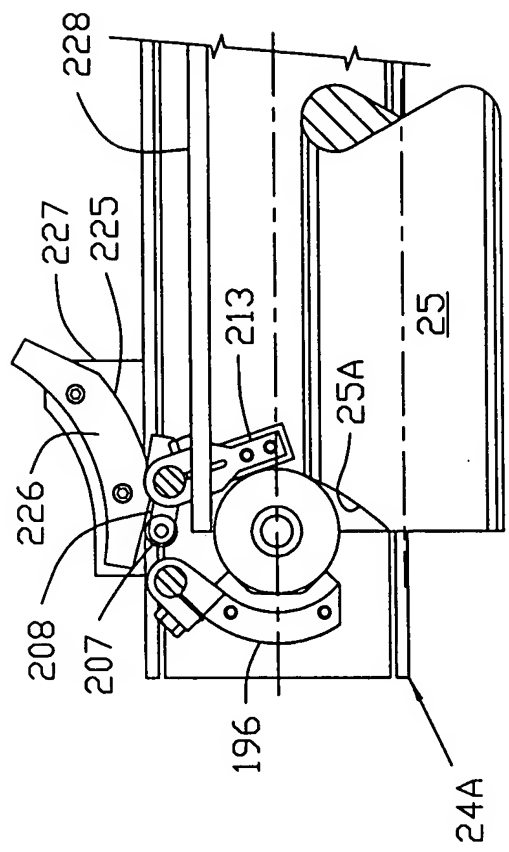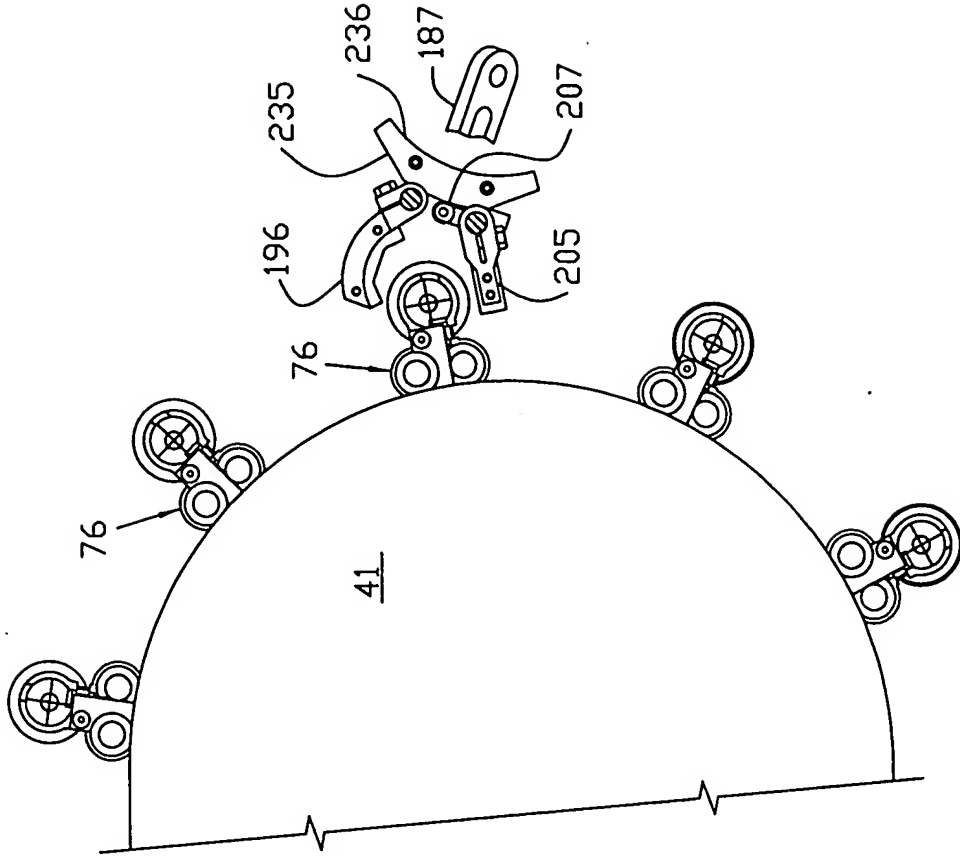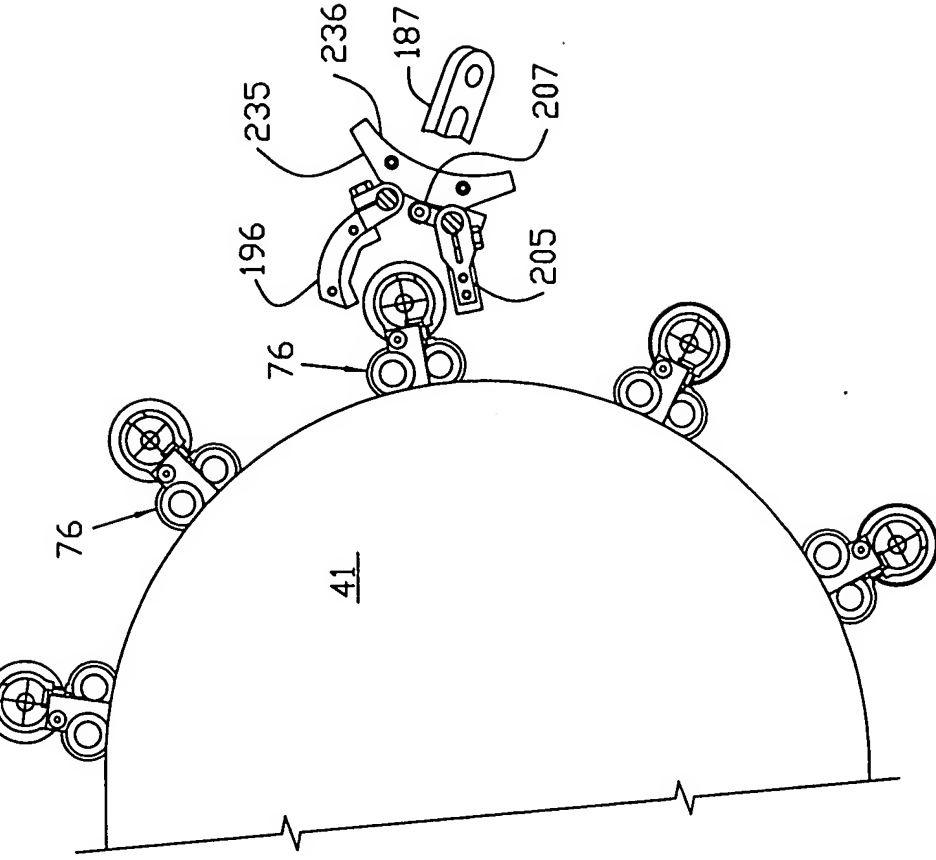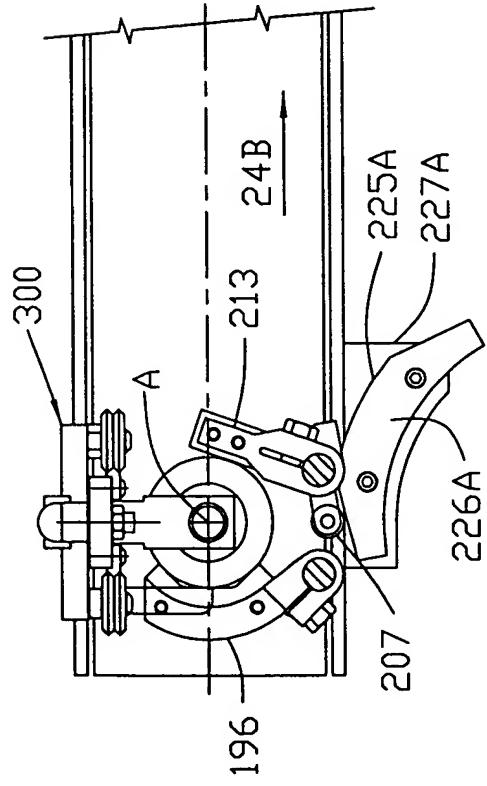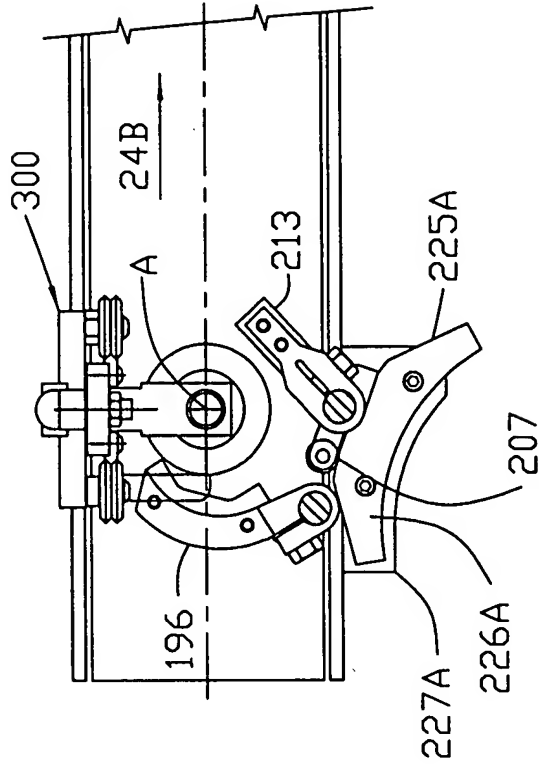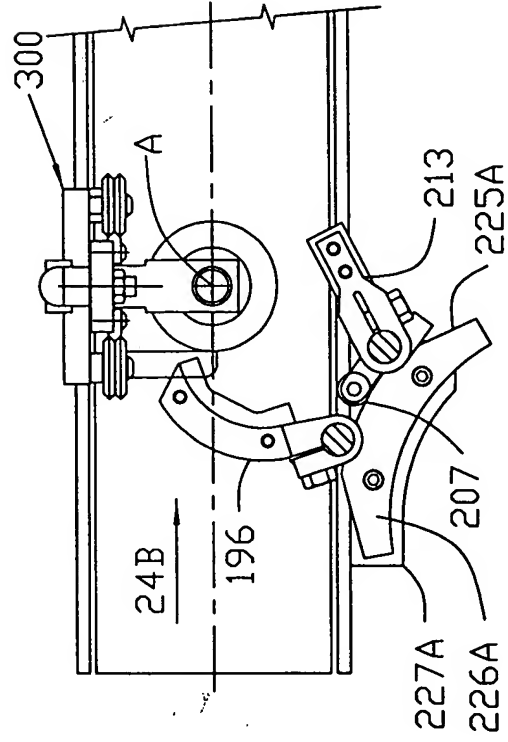Figure 30

Figure 32

Figure 31

Figure 33

300

A

24B

300

213

A

24B

225A
227A

207

226A

Figure 33A

196

196

300

A

24B

213

227A
226A

225A

207

Figure 33C

300
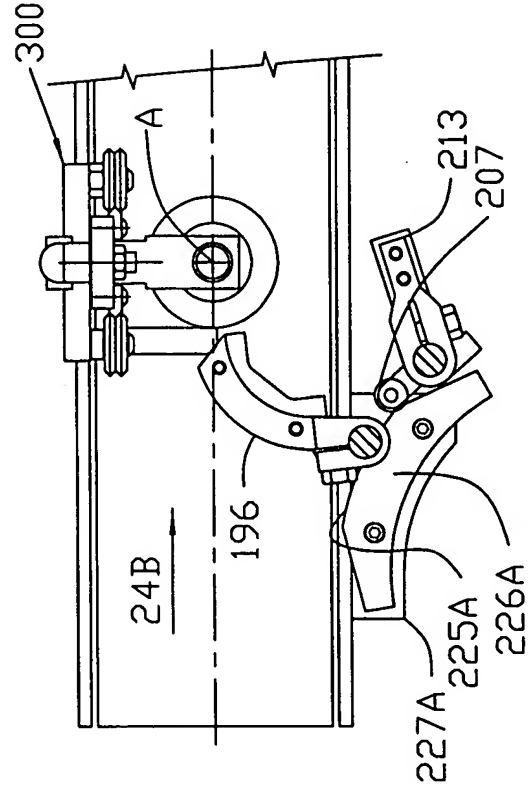
A

24B

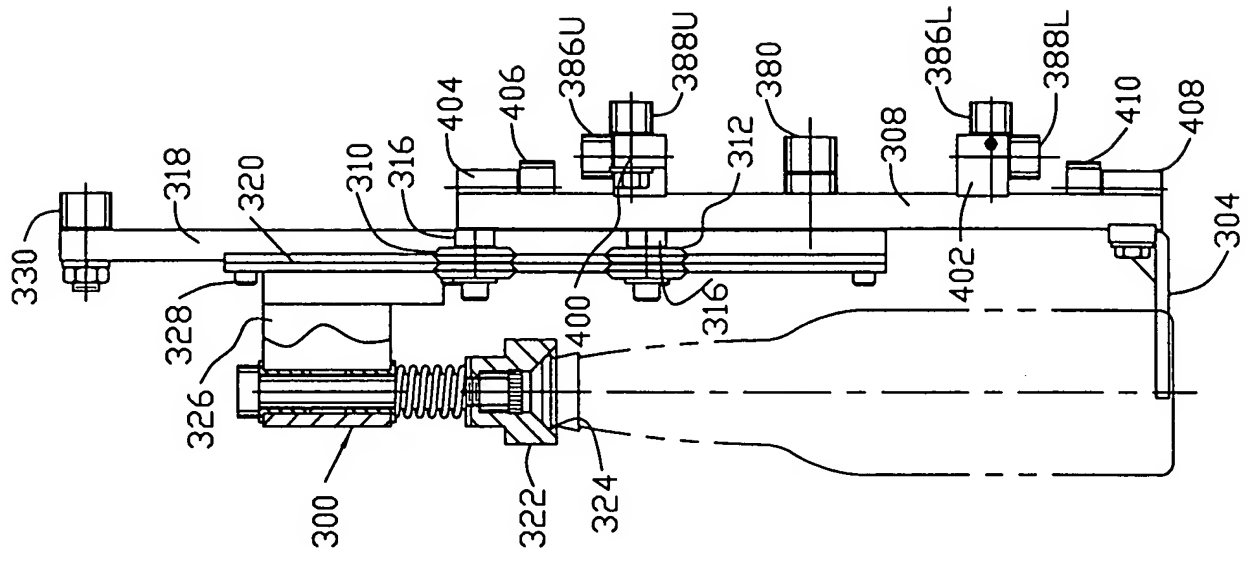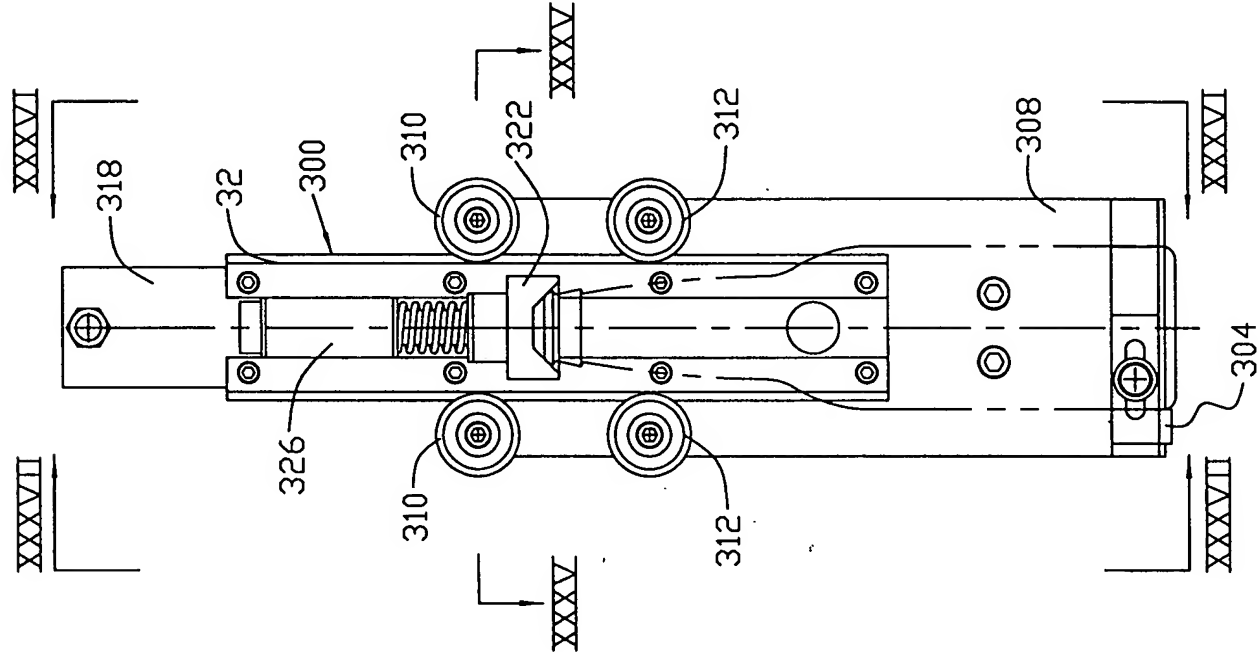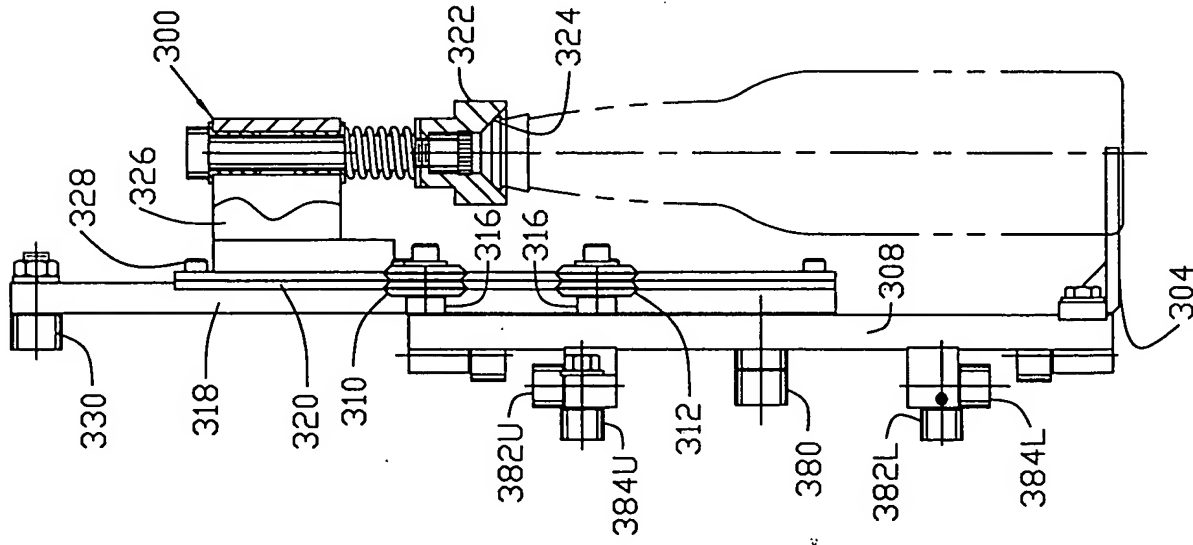213

207

225A

227A
226A

196

Figure 33B

213
207

196

24B

225A
226A

227A

Figure 33D

Figure 36

Figure 34

Figure 37
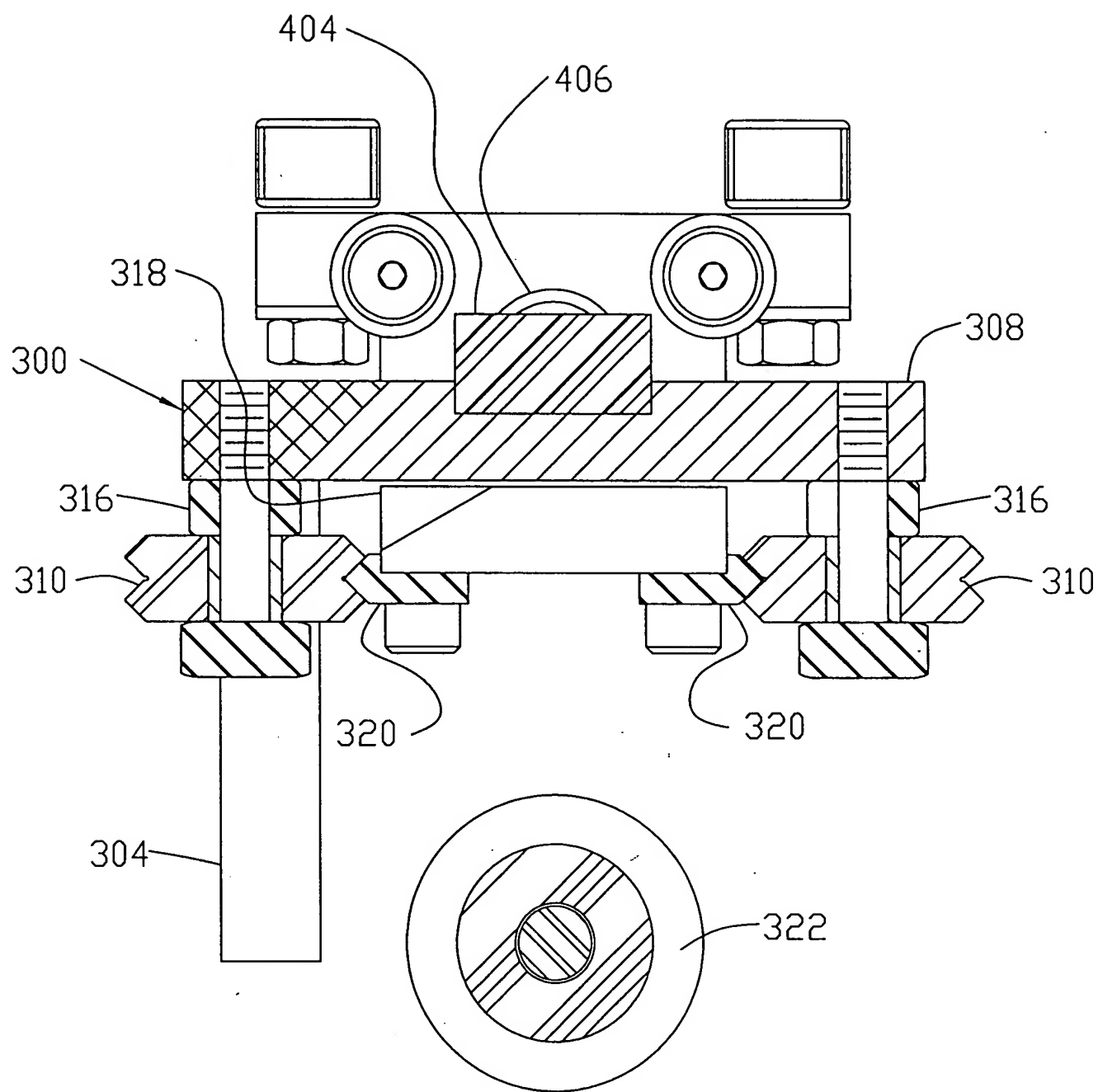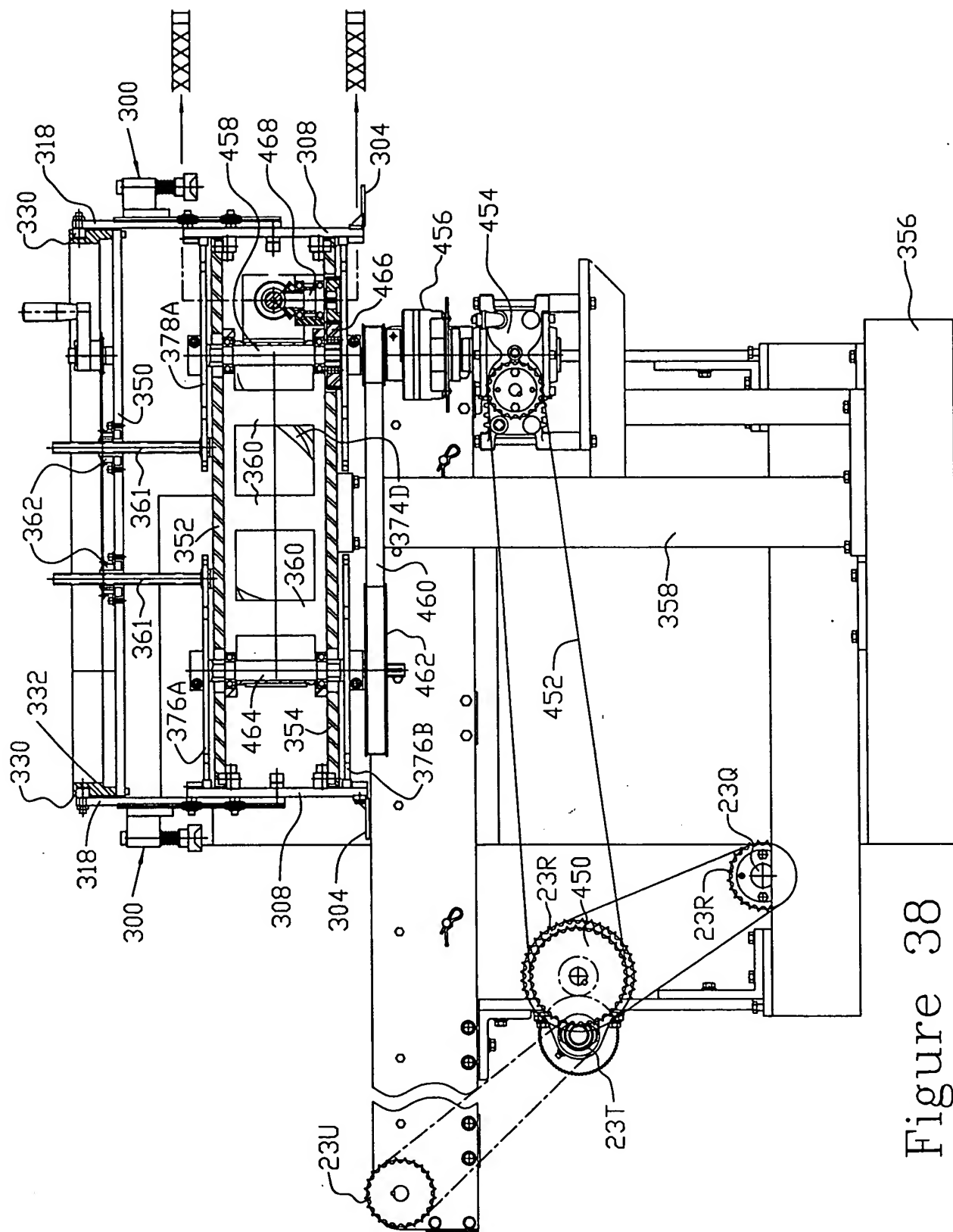
404

406

318

300

316

310

304

308
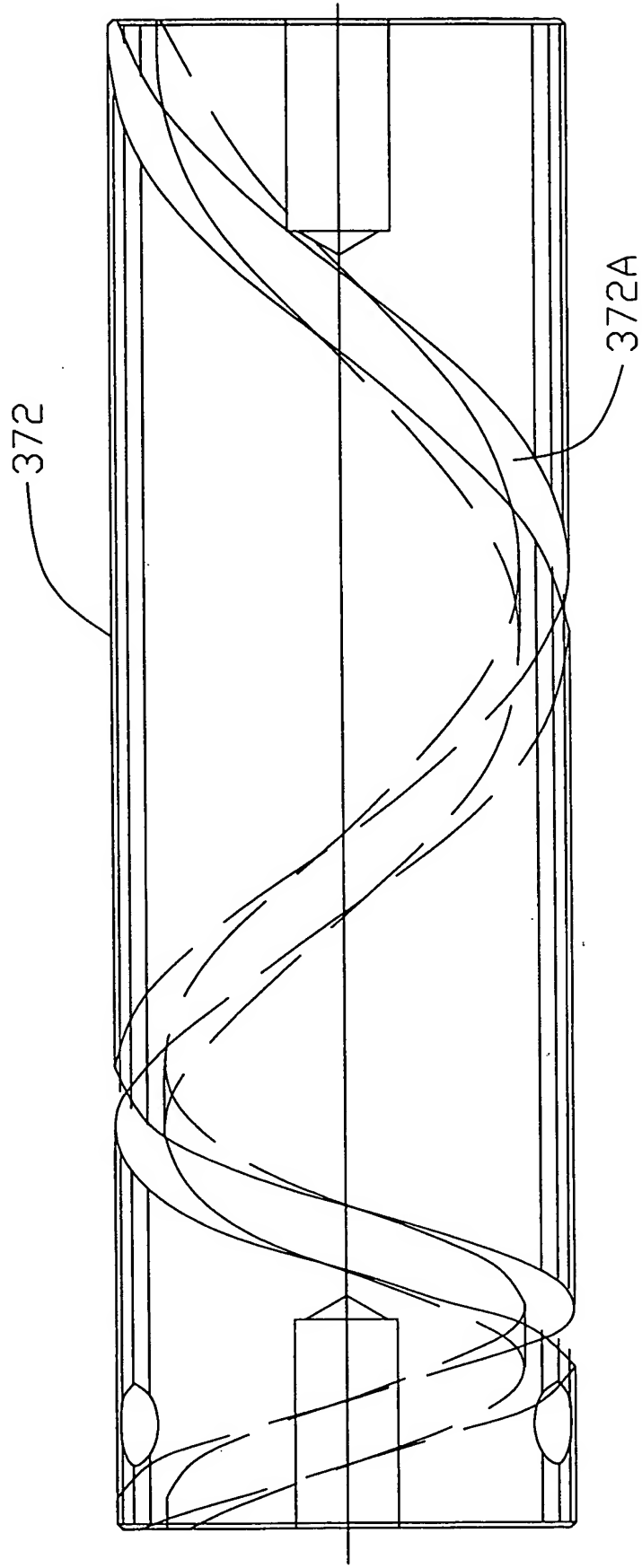
316

310

320

320

322
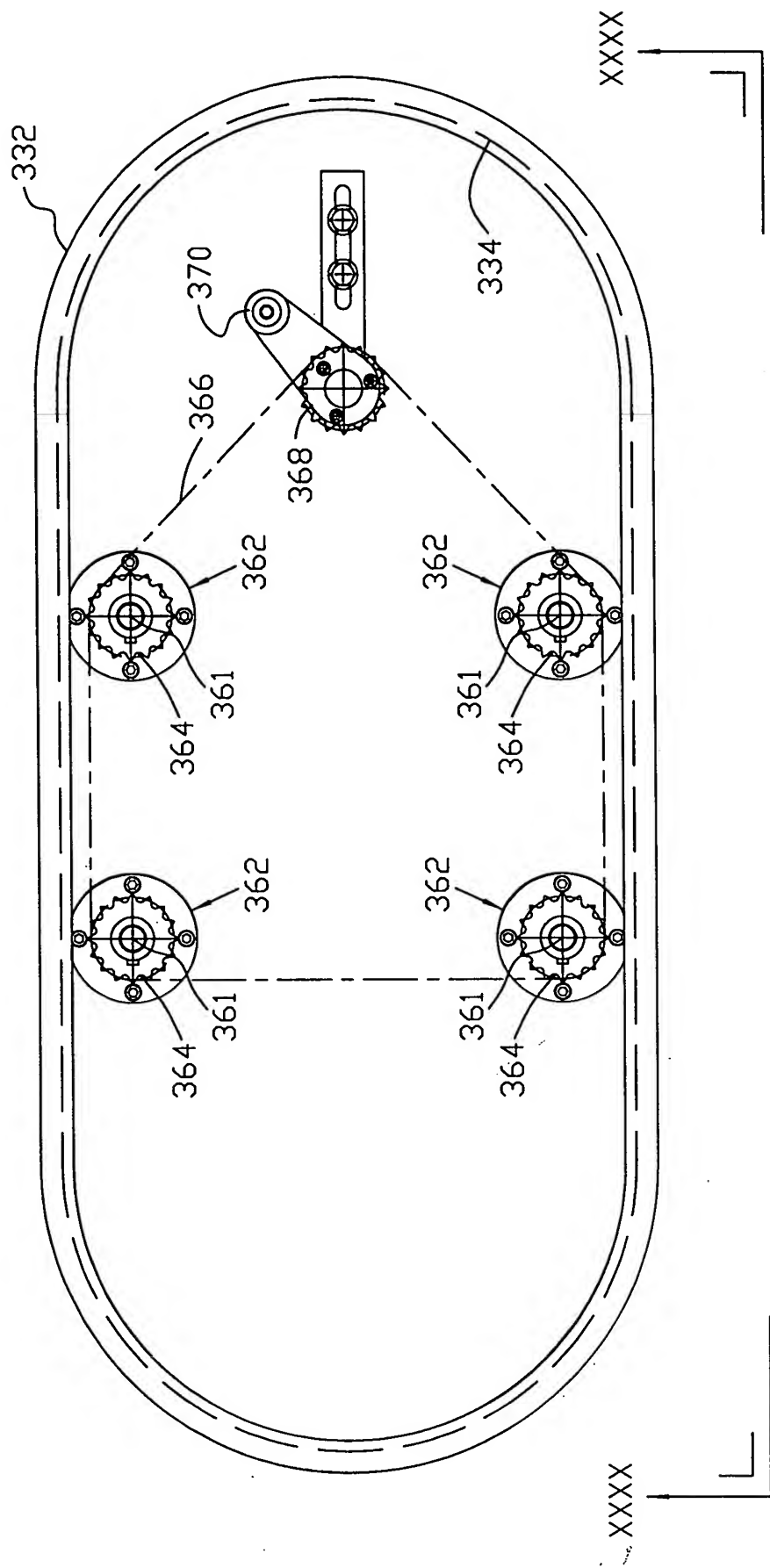
Figure 35

Figure 38

Figure 39

Figure 40

372

372A
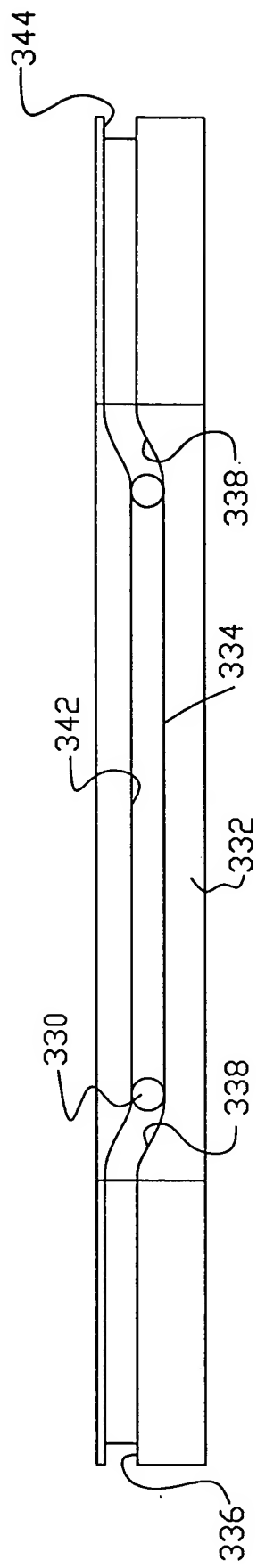
Figure 41

Figure 42

Figure 43

352

378A

412

480

476

470

374

354

378B

414

458

460